

RESILIENCY DEVELOPMENT AS A STRESS COPING STRATEGY: A REVIEW OF SCIENTIFIC LITERATURE

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ABSTRACT

The best way to manage stress is to eliminate it through time management, work redesign, prioritizing, goal setting, and *small wins*. This strategy has permanent consequences, but it often takes an extended period of time to implement. Four kinds of stressors viz., time, encounter, situational, and anticipatory cause negative physiological, psychological, and social reactions in individuals. These reactions are moderated by the **resiliency** that individuals have developed for coping with stress. Improving one's resiliency is an effective stress management strategy. When stressors are long lasting and or are impossible to remove, coping requires the development of personal resiliency. This is the capacity to withstand or manage the negative effects of stress, to bounce back from adversity, and to endure difficult situations (**Masten & Reed, 2002**). Physiological resiliency is strengthened through increased cardiovascular conditioning and improved diet. Psychological resiliency and hardiness are improved by practicing small-wins strategy and deep relaxation. Social resiliency is increased by fostering mentoring relationships and teamwork among coworkers. These strategies produce long-term benefits, but they also take quite a long time to implement. When circumstances make it impossible to apply longer-term strategies for reducing stress, short-term relaxation techniques can temporarily alleviate the symptoms of stress. These strategies have short-term consequences, but they can be applied immediately and repeated over and over again. Citing research studies of resiliency that have emerged from investigations over a period of time, an attempt is made in this Paper to explore in greater detail the development of resiliency to handle stress that can't be eliminated with the help of research studies of resiliency that have emerged from investigations over a period of time.

INTRODUCTION

Most of the scientific literature on stress focuses, unfortunately, on its consequences. Too little examines how to cope effectively with stress while even less addresses how to prevent stress. (**Hepburn, McLoughlin, & Barling, 1997**). The first studies of resiliency emerged from investigations of children in abusive, alcoholic, poverty, or mentally ill parent circumstances. Some of these children surprised researchers by rising above their circumstances and developing into healthy, well-functioning adolescents and adults. They were referred to as highly resilient individuals (**Masten & Reed, 2002**).

Individuals vary in the extent to which stressors lead to pathologies and dysfunctions. Some people are labeled "hot reactors," meaning they have a predisposition to experience extremely negative reactions to stress (**Adler & Hillhouse, 1996; Eliot & Breo, 1984**). For others, stress is experienced more favorably. Their physical condition, personality characteristics, and social support mechanisms mediate the effects of stress and produce **resiliency**, or the capacity to cope effectively with stress. In effect, resiliency serves as a form of inoculation against the effects of stress. It eliminates exhaustion. This helps explain why some athletes do better in "the big game," while others do worse. Some managers appear to be brilliant strategists when the stakes are high; others fold and wilt under the pressure. An elaboration of the difference in disposition toward stress reactions comes from a set of

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studies in which hot reactors were more likely to be: women (men reacted more quickly to stress, but more factors produced stress in women); individuals with low self-esteem and who viewed themselves as less attractive; and children who had been neglected, fearful, or in chaotic or broken homes (*Adler, 1999*).

In managing stress, using a particular hierarchy of approaches has been found to be most effective (*Kahn & Byosiore, 1992; Lehrer, 1996*). First, the best way to manage stress is to eliminate or minimize stressors with *enactive strategies*. These create, or enact, a new environment for the individual that does not contain the stressors. The second most effective approach is for individuals to enhance their overall capacity to handle stress by increasing their personal resiliency. These are called *proactive strategies* and are designed to initiate action that resists the negative effects of stress. Finally, developing short-term techniques for coping with stressors is necessary when an immediate response is required. These are *reactive strategies*; they are applied as on-the-spot remedies to reduce temporarily the effects of stress.

Individuals are better off if they can eliminate harmful stressors and the potentially negative effects of frequent, potent stress reactions. However, because most individuals do not have complete control over their environments or their circumstances, they can seldom eliminate all harmful stressors.

Their next best alternative, therefore, is to develop a greater capacity to withstand the negative effects of stress and to mobilize the energy generated by stressors. Developing *personal resiliency* that helps the body return to normal levels of activity more quickly—or that directs the “revved up engine” in a productive direction—is the next best strategy for eliminating the stressors altogether.

NEED AND IMPORTANCE OF PERSONAL RESILIENCY: THE CONTEXT

Individuals need to examine various causes of stress and come up with a series of preventive strategies before they turn their attention to strategies for managing stress that can't be eliminated. Development of resiliency is one such strategy to handle stress effectively. When stressors are long lasting, or are impossible to remove, coping requires the development of personal resiliency. This is the capacity to withstand or manage the negative effects of stress, to bounce back from adversity, and to endure difficult situations (*Masten & Reed, 2002*).

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We all differ widely in our ability to cope with stress. Some individuals seem to crumble under pressure, while others appear to thrive. A major predictor of which individuals cope well with stress and which do not is the amount of resiliency that they have developed. Two categories of factors—such as positive self-regard and core self-evaluation, good cognitive abilities, and talents valued by society—and the second is personal coping strategies—such as improving relationships and social capital, and a reduction in risk factors such as abuse, neglect, homelessness, and crime (*Masten & Reed, 2002*). One set of factors are personality, self-efficacy, values maturity, etc. The second set is more behavioral and include factors such as physical, cultural, work, intellectual, social, family, and spiritual activities. It is here, resiliency is fostered by achieving balance in the various aspects of life involving these activities that generally characterize most people's lives. Each of them identifies an important aspect of life that must be developed in order to achieve resiliency. The most resilient

individuals are those who have achieved a certain degree of **life balance**. They actively engage in activities in each segment of the circles so that they achieve a degree of balance in their lives. We find individuals with zero point of involvement to maximum involvement in these spheres of life. Individuals who are able to best able to cope with stress would have spent time developing a variety of dimensions of their lives. Degrees of involvement that are lopsided is as much an indicator of non-resiliency as not having any involvement in some spheres. Overemphasizing one or two segments to the exclusion of others often creates more stress than it eliminates. Life balance is the **KEY** (*Lehrer, 1996; Murphy, 1996; Rostad & Long, 1996*).

This prescription, of course, is counterintuitive. Generally, when we are feeling stress in one area of life, such as an overloaded work schedule, we respond by devoting more time and attention to it. While this is a natural reaction, it is counterproductive for several reasons. First, the more we concentrate exclusively on work, the more restricted and less creative we become. We lose perspective, cease to take fresh points of view, and become overwhelmed more easily. Many breakthroughs in problem solving come from the thought processes stimulate by unrelated activities. That is why several major corporations send their senior managers on high-adventure wilderness retreats, invite thespian troupes to perform plays before the executive committee, require volunteer community service, or encourage their managers to engage in completely unrelated activities outside of work. Second, refreshed and relaxed minds think better. Third, the cost of stress-related illness decreases markedly when employees participate in well-rounded wellness programs. Well-developed individuals, who give time and attention to cultural, physical, spiritual, family, social, and intellectual activities in addition to work, are more productive and less stressed than those who are workaholics (*Adler & Hillhouse, 1996; Hepburn, McLoughlin & Barling, 1997*).

DEVELOPING PERSONAL RESILIENCY OF MANAGERS

There are three common areas of resiliency development for managers; physical resiliency, psychological resiliency, and social resiliency. Development in each of these areas requires initiative on the part of the individual and takes a moderate amount of time to achieve. These are not activities that can be accomplished by lunchtime or by the weekend. Rather, achieving life balance and resiliency requires ongoing initiative and continuous effort.

I. Physiological Resiliency

One of the most crucial aspects of resiliency development involves one's physical condition as it significantly affects the ability to cope with stress. Two aspects of physical condition combine to determine physical resiliency: cardiovascular conditioning and dietary control.

- (a) **Cardiovascular Conditioning:** An emphasis on physical conditioning in business has resulted partly from overwhelming evidence that individuals in good physical condition are better able to cope with stressors than those in poor physical condition. Today, thousands of major corporations now have in-house fitness facilities. Three primary purposes exist for a regular exercise program: maintaining optimal weight, increasing psychological well-being, and improving the cardiovascular system. An advantage of regular physical exercise as a resiliency development strategy is that it improves mental as well as physical outlook. It increases self-esteem and gives individuals the energy to be more alert and attentive throughout the day. Episodes of depression are far less frequent. Exercise fosters the necessary energy to cope with the stresses of both unexpected events and dull routine.

Physically active individuals are less prone to anxiety, have less illness, and miss fewer days of work (*Griest et al., 1979; Murphy, 1996*).

Researchers have found a chemical basis for the psychological benefit of exercise: the brain releases endorphins during periods of intense physical activity. This substance numbs pain and produces a feeling of well-being, sometimes referred to as “jogger’s high,” which is a euphoric, relaxed feeling reported by long-distance runners (*Rostad & Long, 1990*). Another vital benefit of exercise is a strengthened cardiovascular system (*Greenberg, 1987*).

The best results come from aerobic exercises that do not require more oxygen than a person can take in comfortably. However, the cardiovascular system is improved by exercise only when two conditions are met: (i) The target heart rate is sustained throughout the exercise, and (ii) the exercise occurs for 20 to 30 minutes, three or four days each week. Since cardiovascular endurance decreases after 48 hours, it is important to exercise at least every other day.

- (b) **Dietary Control:** The adage that “You are what you eat” is sobering, especially given the fact that Americans, for example, annually consume an average of 100 pounds of refined sugar, 125 pounds of fat, 36 gallons of carbonated beverages, and 25 times more salt than the human body requires (*Adler & Hillhouse, 1996*). Since diet has received a great deal of attention among Americans in the past decade or so, most people are well informed about healthy foods and eating habits, but the key principles can’t be repeated too often. Some of the key prescriptions agreed upon by most medical professionals (see *Adler, 2005; Adler & Hillhouse, 1996; Hubbard & Workman, 1998*): (i) eat a variety of foods, (ii) maintain optimal weight, (iii) reduce fat intake, (iv) eat more whole foods, (v) reduce sugar intake, (vi) reduce sodium intake, (vii) avoid alcohol, (viii) restrict caffeine intake, (ix) take vitamin and mineral supplements, and (x) make eating a relaxing time.

II. *Psychological Resiliency*

Another important moderator of the effects of stress is an individual’s psychological resiliency. Individuals with certain psychological characteristics, sometimes referred to as “resilient personality types,” tend to handle stress better than others. In this context, we need to focus on two examples that show best the relationship between personality and vulnerability to stress: the hardy personality and the Type A personality.

Hardiness: The concept of “hardiness” can be used to discuss general psychological attributes that foster resiliency. Psychological resiliency has recently begun to be studied much more than in the past (for example, see *Gittell, Cameron, & Lim, 2006; Sutcliffe & Vogus, 2003*), but one of the best sources for learning how to develop psychological resiliency remains a book that is more than two decades old. In the *Hardy Executive*, *Maddi and Kobasa (1984)* described three elements that characterize a hardy, or highly stress-resistant, personality.

Hardiness results from (1) feeling in control of one’s life, rather than powerless to shape external events; (2) feeling committed to and involved in what one is doing, rather than alienated from one’s work and other individuals; and (3) feeling challenged by new experiences rather than viewing change a threat to security and comfort. According to these authors, hardy individuals tend to interpret stressful situations positively and optimistically, and they respond to stress constructively. As a result, their incidence of illness and emotional dysfunction under stressful

conditions is considerably below the norm. These three concepts—control, commitment, and challenge—are central to the development of a variety of management skills, and are crucial for mitigating the harmful effects of stress (*Cowley, 2000; Kobasa, 1979, 1982*). Confidence in one's own efficacy produces low fear of failure, high expectations, willingness to take risks, and persistence under adversity (*Anderson, 1077; Bandura 1997; Ivancevich & Matterson, 1980; Mednick, 1982; Sorenson, 1998*), all of which contribute to resiliency under stress. Holding a positive self-regard or having a high core self-evaluation score is strongly related to psychological resiliency (*Judge & Bono, 2001*).

Feeling part of a group, feeling cared about, and feeling trusted by others engender norms of cooperation and commitment and encourage constructive response to stress (*Bandura, 1997*). By contrast, a different complex of personality attributes, the so called Type A syndrome, is associated with reduced hardiness and higher levels of psychological stress.

The Type A Personality: A second important aspect of psychological resiliency relates to a personality pattern many individuals develop as they enter the competitive worlds of advanced education and of management. By far, the most well known connection between personality and resiliency relates to a combination of attributes known as **Type A personality**. For more than four decades, scientists have been aware of a link between certain personality attributes and stress-related behavioral, psychological, and physiological problems such as anxiety, deteriorating relationships, and heart disease (*Friedman & Rosenman, 1974*). This Type A sense of urgency, of being able to overcome any obstacle by working harder and longer, works against the ability to develop psychological hardiness. When stressors are encountered, arousal levels increase, and the tendency to combat them by increasing arousal levels, or effort, even further. But at high arousal levels, coping responses become more primitive (*Staw, Sandelands, & Dutton, 1981; Weick, 1995*). Patterns of response that were learned most recently are the first ones to disappear, which means that the responses that are most finely tuned to the current stressful situation are the first ones to go. The ability to distinguish among fine-grained stimuli actually deteriorates, so the extra energy expended by individuals trying to cope becomes less and less effective. *Weick (1984, 1995)* pointed out that highly stressed people consequently find it difficult to learn new responses, to brainstorm, to concentrate, to resist relying on old non-adaptive behavior patterns, to perform complex responses, to delegate, and to avoid the vicious spiral of escalating arousal. Resiliency deteriorates.

The Small-Wins Strategy: *Kuhn and Beam (1982, pp. 249-250)* illustrated the power of small wins. An effective antidote to the Type A escalation problem is working for “small wins” where in individuals work for incremental accomplishments rather than trying to achieve a major milestone or “hit a home run,” they consciously remain sensitive to the progress they are making, they can celebrate victories, and they can develop a sense of making progress, all the while coping with a major stressor. Research clearly demonstrates that a small-wins strategy is superior to a strategy of trying to cope with stressors in large chunks (*Weick, 1984, 1995*).

Deep-Relaxation Strategies: In addition to a small-wins strategy, a second approach to building psychological resiliency is to learn and practice a deep-relaxation technique. Research demonstrates a marked decrease in Type A personality characteristics for regular users of meditation and deep-relaxation techniques. Using the automotive analogy, individuals who use deep-relation technique exercises find that when stress occurs, their “engines” don't rev up as

high, and they return to idle faster (*Curtis & Detert, 1981; Davis, Esthiman, & McKay, 1980; Greenberg, 1987*).

These techniques differ from temporary, short-term relaxation techniques. They include meditation, yoga, autogenic training or self-hypnosis, biofeedback, and so on. Considerable evidence exists that individuals who practice such techniques regularly are able to condition their bodies to inhibit the negative effects of stress (*Beary & Benson, 1977; Cooper & Aygen, 1979; Deepak, 1995; Delibeck & Shatkin, 1991; Orme-Johnson, 1973; Stone & Deleo, 1976; Yogi, 1994*). Most of these techniques must be practiced over a period of time to develop fully, but they are not difficult to learn.

III. Social Resiliency: The third factor moderating the harmful effects of stress and contributing to resiliency involves developing close social relationships. Individuals who are embedded in supportive social networks are less likely to experience stress and are better equipped to cope with its consequences (*Cordes & Dougherty, 1993; Lehrer, 1996; Singh, 1993*). Supportive social relations provide opportunities to share one's frustrations and disappointments, to receive suggestions and encouragement, and to experience emotional bonding. Poignant testimony to the value of social support systems during periods of high stress comes from the experience of soldiers captured during World War II and the Korean and Vietnam wars. Aside from personal friendships or family relations, two types of social support systems can be formed as part of a manager's job. One is a mentor relationship; the other is a task team. Most individuals, with the possible exception of the most senior managers, can profit from a mentoring relationship. The research is clear, in fact, that career success, work satisfaction, and resiliency to stress are enhanced by a mentoring relationship (*Bell, 1998; Hendricks, 1996; Kram, 1985*).

Many organizations formally prescribe a mentoring system by assigning a senior manager to shepherd a younger manager when he or she enters the organization. With rare exceptions, when the contact is one way, from the top down, these relationships don't work out (*Kram, 1985*). Smoothly functioning work teams also enhance social resiliency. The social value of working on a team has been well documented in research and there are reviews of the same (*Dyer, 1987; Katzenbach & Smith, 1993*). The more cohesive the team, the more support it provides to its members. Members of highly cohesive teams communicate with one another more frequently and more positively and report higher satisfaction, lower stress, and higher commitment levels than do individuals who do not feel as though they are part of a work team (*Lawler, Mohrman, and Ledford, 1992*).

SUMMARY AND CONCLUDING COMMENTS

Eliminating sources of stress and developing resiliency to stress are the most desirable stress-management strategies as they have a permanent or long-term effect on our well-being. However, the occurrence of stressors is sometimes beyond our control so it may be impossible to eliminate them. Moreover, developing resiliency takes time, so sometimes we must use temporary reactive mechanisms in order to maintain equilibrium.

Although increased resilience can buffer the harmful effects of stress, we must sometimes take immediate action in the short term to cope with the stress we encounter. Implementing short-term strategies reduces stress temporarily so that longer-term stress-elimination or resiliency strategies are largely reactive and must be repeated whenever stressors are encountered because, unlike other strategies, their effects are only temporary. Five of the best-known and easiest to learn

techniques are: ***Muscle relaxation*** and ***deep breathing*** that are physiological and imagery and fantasy, rehearsal, and reframing are psychological. Muscle relaxation involves easing the tension in successive muscle groups. Deep breathing is done by taking several successive slow, deep breaths, holding them for five seconds. ***Imagery and fantasy*** eliminate stress temporarily by changing the focus of one's thoughts. Imagery involves visualizing an event, using "mind pictures." An increasingly common practice for athletes is to visualize successful performance or to imagine themselves achieving their goal. Research has confirmed both the stress-reduction advantages of this technique as well as the performance enhancement benefits (*e.g., Deepak, 1995*). Using ***rehearsal*** technique, people work themselves through potentially stressful situations, trying out different scenarios and alternative reactions. Appropriate reactions are rehearsed, either in a safe environment before stress occurs, or "off-line," in private, in the midst of a stressful situation. Reframing involves temporarily reducing stress by optimistically redefining a situation as manageable. It serves as a key to developing "hardiness" and "emotional intelligence".

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