FACTORS INFLUENCING STRESS TOLERANCE

Some people seem to be able to withstand the ravages of stress better than others can. Why? Because a number of moderator variables can reduce the impact of stress on physical and mental health. To shed light on differences in how well people tolerate stress, we'll look at five key moderator variables: social support, hardiness, optimism, sensation seeking, and autonomic reactivity. As you'll see, these factors influence people’s appraisals of potentially stressful events and their emotional, physical, and behavioral responses to stress.

Social Support

Friends may be good for your health! This startling conclusion emerges from studies on social support as a moderator of stress. Social support refers to various types of aid and succor provided by members of one's social networks. In one study, Jemmott and Magloire (1988) examined the effect of social support on immunal functioning in a group of students going through the stress of final exams. They found that students who reported stronger social support had higher levels of an antibody that plays a key role in warding off respiratory infections. Positive correlations between high social support and greater immunal functioning were also seen in a study that focused on spouses of cancer patients (Baron et al., 1990).

Many studies have found evidence that social support is favorably related to physical health (Cohen, 1988; Vogt et al., 1992). Indeed, in a major review of the relevant research, House, Landis, and Umberson (1988) argue that the evidence linking social support to health is roughly as strong as the evidence linking smoking to cancer. Social support seems to be good medicine for the mind as well as the body, as most studies find an association between social support and mental health (Leavy, 1983; Sarason, Pierce, & Sarason, 1994). It appears that social support serves as a protective buffer for individuals during times of high stress, reducing the negative impact of stressful events. Furthermore, social support has its own positive effects on health, which may be apparent even when one isn't under great stress (Cohen & Syme, 1985).

The power of social support is such that even pets may provide social bonds that buffer the effects of stress. For instance, Siegel (1990) found that elderly pet owners required less medical care than comparable subjects who did not own pets. In another study, women exposed to brief stress showed less physiological reaction when in the company of their pets (Allen et al., 1991).

Of course, social bonds are not equivalent to social support (Rook, 1990). Indeed, some people in one’s social circles may be a source of more stress than support. (Lepore, 1992; Vinokur & van Ryn, 1993). Friends and family can put one under pressure, make one feel guilty, break promises, and so forth. Pagel, Erdly, and Becker (1987) looked at both the good and bad sides of social relations in measuring subjects' satisfaction with their social networks. They found that the helpfulness of friends and family wasn't as important as
whether friends and family caused emotional distress. Adapting a line from an old Beatles song, the investigators concluded that "We get by with (and in spite of) a little help from our friends." To some extent, then, people who report good social support may really mean that their friends and family aren't driving them crazy.

**Hardiness**

Another line of research indicates that certain personality traits may moderate the impact of stressful events. Suzanne Ouellette (formerly Kobasa) reasoned that if stress affects some people less than others, then some people must be hardier than others. She set out to determine whether personality factors might be the key to these differences in hardiness.

Kobasa (1979) used a modified version of the Holmes and Rahe (1967) stress scale (SRRS) to measure the amount of stress experienced by a group of executives. As in most other studies, she found a modest correlation between stress and the incidence of physical illness. However, she carried her investigation one step further than previous studies. She compared the high-stress executives who exhibited the expected high incidence of illness against the high-stress executives who stayed healthy. She administered a battery of psychological tests, comparing the executives along 18 dimensions of personality. She found that the hardier executives "were more committed, felt more in control, and had bigger appetites for challenge" (Kobasa, 1984, p. 70). These traits have also shown up in many other studies of hardiness (Ouellette, 1993).

Thus, **hardiness is a personality syndrome marked by commitment, challenge, and control that is purportedly associated with strong stress resistance.** Hardiness may reduce the effects of stress by altering stress appraisals. Hardy subjects tend to appraise potentially stressful events as less threatening and less undesirable than others do (Rhodewalt & Zone, 1989). However, some doubts have been expressed about the relevance of the hardiness syndrome to women (Wiebe, 1991) and active debate continues about the key elements of hardiness (Funk, 1992). Nonetheless, Ouellette’s work has stimulated research on how personality affects one’s health and tolerance of stress. Of particular interest is new work on optimism, a trait that researchers have paid little attention to until recently.

**Optimism**

Defining **optimism as a general tendency to expect good outcomes**, Michael Scheier and Charles Carver (1985) found a correlation between optimism and relatively good physical health in a sample of college students. In another study that focused on surgical patients, optimism was found to be associated with a faster recovery and a quicker return to normal activities after coronary artery bypass surgery (Scheier et al., 1989). Research suggests that optimists cope with stress in more adaptive ways than pessimists (Aspinwall & Taylor, 1992; Scheier & Carver, 1992). Optimists are more likely to engage in action-oriented, problem-focused coping, are more willing than pessimists to seek social support, and are more likely to emphasize the positive in their appraisals of stressful events. In comparison, pessimists are more likely to deal with stress by giving up or by engaging in denial.
In a related line of research, Christopher Peterson and Martin Seligman have studied how people explain bad events (personal setbacks, mishaps, disappointments, and such). They identified a **pessimistic explanatory style** in which some people tend to blame setbacks on their personal shortcomings. In a retrospective study of men who graduated from Harvard back in the 1940s, they found an association between this pessimistic explanatory style and relatively poor health (Peterson, Seligman, & Vaillant, 1988). In their attempt to explain this association, they speculate that pessimism leads to passive coping efforts and poor health care practices. A subsequent study also found an association between pessimism and suppressed immune function (Kamen-Siegel et al., 1991).

**Sensation Seeking**

Sensation seeking is yet another personality trait that affects how we respond to stress. First described by Marvin Zuckerman (1971, 1979, 1990), **sensation seeking is a generalized preference for high or low levels of sensory stimulation**. People who are high in sensation seeking prefer, and perhaps even need, a high level of stimulation. They are easily bored, and they enjoy challenges. They like activities that may involve some physical risk, such as mountain climbing, whitewater rafting, and surfing. They satisfy their appetite for stimulation by experimenting with drugs, numerous sexual partners, and novel experiences (such as travel to unusual places). They tend to relish gambling, spicy foods, provocative art, wild parties, and unusual friends.

Obviously, high sensation seekers actively pursue experiences that many people would find stressful. However, now that you know how subjective stress is, it should come as no surprise that sensation seekers see these experiences as less threatening, risky, and anxiety-provoking than other people would (Franken, Gibson, & Roland, 1992). Zuckerman (1991) believes that there is a biological predisposition toward high sensation seeking.

Although sensation seeking may be associated with stress resistance, we hasten to point out that high sensation seeking may often be more maladaptive than adaptive. In comparison to others, high sensation seekers are more likely to indulge in drug abuse, have difficulty in school, exhibit unhealthy habits (such as smoking or driving too fast), and engage in impulsive behavior, including fighting with others (Zuckerman, 1979, 1990). Some studies have even found an association between high sensation seeking and criminal behavior (Stacy, Newcomb, & Bentler, 1993; Young, 1990). Thus, the disadvantages of high sensation seeking may well outweigh the advantages.

**Autonomic Reactivity**

In light of the physiological response that people often make to stress, it makes sense that physical makeup might influence stress tolerance. According to this line of thinking, those individuals who have a relatively placid autonomic nervous system should be less affected by stress than those who are equipped with a highly reactive ANS. Thus far, most of the
research on autonomic reactivity has focused on autonomically regulated cardiovascular (heart rate and blood pressure) reactivity in response to stress.

Subjects who are exposed to stressful tasks in laboratory settings show fairly consistent personal differences in cardiovascular reactivity over time and across a variety of tasks (Manuck et al., 1993; Sherwood, 1993). There may be a genetic basis for these differences in cardiovascular reactivity (Smith et al., 1987), which can be seen even in children (Matthews, Woodall, & Stoney, 1990). However, the research thus far has largely focused on reactions to simple, short-term stressors in the laboratory (challenging mental tasks) that are relatively pale imitations of real-life stress. Hence, more research is needed on reactions to chronic, ongoing stress and stress emanating from social interactions (Kelsey, 1993; Lassner, Matthews, & Stoney, 1994). Nonetheless, the preponderance of evidence suggests that certain patterns of cardiovascular reactivity probably make some people more vulnerable than others to stress-related heart disease (Blascovich & Katkin, 1993).¹