

BEHAVIORAL STRESS MANAGEMENT TECHNIQUES

On a more positive note, our responses to stress are not completely preset and out of our control. Stress management techniques teach individuals how to prevent, reduce, and cope with stress. Examples of such techniques are relaxation, hypnosis, cognitive restructuring, visualization, disclosure, conditioning, assertiveness training, biofeedback, and meditation. Stress management has been found to be successful in preventing the development of and reducing already established disease. In myocardial infarction patients, stress management was found to improve the quality of life and reduce morbidity. It has also been found to decrease blood pressure in patients with hypertension. In HIV disease, stress management training buffered illness-related psychological distress. In cancer patients, stress management intervention was found to influence immune responses of patients as well as the course of their illness.

—Noha H. Farag and
Paul J. Mills

See also ALLOSTATIS, ALLOSTATIC LOAD, AND STRESS;

ASTHMA AND STRESS; BLOOD PRESSURE, HYPERTENSION,
AND STRESS; CARDIOVASCULAR PSYCHOPHYSIOLOGY:
MEASURES; CARDIOVASCULAR REACTIVITY; GASTRIC
ULCERS AND STRESS; METABOLIC SYNDROME AND STRESS;
PEPTIC ULCERS AND STRESS; PSYCHONEUROIMMUNOLOGY;
PSYCHOPHYSIOLOGY: THEORY AND METHODS; WOUND
HEALING AND STRESS

Further Reading

- Sapolsky, R. M. (2000). *Why zebras don't get ulcers*. New York: W. H. Freeman.
- Schneiderman, N., McCabe, P., & Baum, A. (Eds.). (1992). *Perspectives in behavioral medicine: Stress and disease processes*. Hillsdale, NJ: Lawrence Erlbaum.
- Turner, J. R., Sherwood, A., & Light, K. C. (Eds.). (1992). *Individual differences in cardiovascular response to stress*. New York: Plenum.

STRESS-BUFFERING HYPOTHESIS

Acute or chronic stressful experiences such as illness, life events, and developmental transitions often impose demands that we are unable to address. Such

experiences are thought to put people at risk for psychological and physical disease and disorder. The provision or exchange of emotional, informational, or instrumental resources in response to others' needs is thought to facilitate coping with these demands and consequently be protective. This proposal is called the stress-buffering hypothesis—social resources (supports) will ameliorate the potentially pathogenic effects of stressful events. Although aid can be provided by professionals or in the context of formal "helping" groups, this entry focuses on support provided in informal relationships.

The stress-buffering hypothesis was formally proposed in 1976 by physician and epidemiologist John Cassel and psychiatrist Sidney Cobb. Both argued that those with strong social ties were protected from the potential pathogenic effects of stressful events. Cassel (1976) thought that stressors that placed persons at risk for disease were often characterized by confusing or absent feedback from the social environment. In contrast, the impact of the stressors was mitigated among individuals whose networks provided them with consistent communication of what is expected of them, assistance with tasks, evaluation of their performance, and appropriate rewards (Cassel, 1976). Similarly, Cobb (1976) thought that major life transitions and crises placed people at risk. He argued that those who interpreted communications from others signifying that they were cared for and valued and that they belonged to a network of mutual obligation were protected. He thought that this protection occurred because these perceptions facilitated coping and adaptation (see more recent discussion by Lakey & Cohen, 2000; Thoits, 1986).

Correlational studies testing the stress-buffering hypothesis have generally been supportive. Although this literature has primarily focused on psychological distress as an outcome (see Cohen & Wills, 1985; Schwartzer & Leppin, 1989), there are a few studies focusing on physical disease outcomes as well (e.g., Rosengren, Orth-Gomer, Wedel, & Wilhelmsen, 1993). Overall, work on stress-buffering indicates the importance of the "perceived availability" of support (e.g., Wethington & Kessler, 1986). In contrast, actually receiving support has often been correlated with negative outcomes, presumably because actual receipt indicates the need for support as well as its availability.

Research also suggests that the most effective support is not asked for, but is instead provided in the course of everyday social transactions (Barerra,

Sandler, & Ramsay, 1981; Eckenrode & Wethington, 1990; Pearlin & Scholler, 1978). We do not generally think of support provided by close friends and relatives as help and often are unaware of receiving it (Bolger, Zuckerman, & Kessler, 2000). Actually asking for help is a more complicated issue with the request raising issues of equity and relationship maintenance and quality (Fisher, Nadler, & Whitcher-Alagna, 1982). The idea is that our close relations should know we can use their support and respond without the need for a formal request for help.

How does social support provide protection from stressful events? Support may play a role at several points in the causal chain linking stress to health (Cohen, Gottlieb, & Underwood, 2000; Gore, 1981; House, 1981). First, support may intervene between the stressful event and a stress reaction by attenuating or preventing a stress appraisal. More specifically, the perception that others can and will provide resources may redefine the harm potential of a situation and bolster one's perceived ability to cope with imposed demands, thereby preventing a situation from being appraised as highly stressful (Thoits, 1986). Second, support beliefs may reduce or eliminate the affective reaction to a stressful event, dampen physiological responses to the event, or prevent or alter maladaptive behavioral responses. The availability of persons to talk to about problems has also been found to reduce the intrusive thoughts that act to maintain chronic maladaptive responses to stressful events (Lepore, Silver, Wortman, & Wayment, 1996). Finally, support may intervene by reducing the stress reaction or by directly influencing physiological processes. Support may alleviate the impact of stress by providing a solution to the problem, by reducing the perceived importance of the problem, or by providing a distraction from the problem. It may also tranquilize the neuroendocrine system so that people are less stress reactive, or facilitate health-promoting behaviors such as exercise, proper nutrition, and rest (cf. Cohen & Wills, 1985; House, 1981).

Several different types of support have been delineated, and it is posited that these functions may be differentially useful for a range of stressors (Cohen & McKay, 1984; Cohen & Wills, 1985; Cutrona & Russell, 1990; Sandler, Miller, Short, & Wolchik, 1989). There are several typologies of support, but most include components of emotional (being cared for and valued), informational (information about the stressful events and coping with them), and material aid. The stress-support matching hypothesis (Cohen &

McKay, 1984; Cutrona & Russell, 1990) suggests that the potential benefit of a support type depends on which function will be most effective for a particular type of stressful event. Interestingly, evidence suggests that emotional support provides protection in the face of a wide range of stressful events, while other types of support seem to respond more specifically to specific needs elicited by stressful events (Cohen & Wills, 1985).

Consistent evidence is found for the buffering hypothesis when one ensures that certain methodological constraints are met (Cohen & Wills, 1985; Schwarzer & Leppin, 1989). For example, it is important that the study have a large sample size, a reasonable distribution of stress and support values, measures with acceptable psychometric properties, and nonconfounded stress and support measures. As mentioned earlier, effects are most consistently found with measures of perceived availability of support, especially emotional support.

A second relevant literature is the study of the effectiveness of social support interventions for helping people in the face of stressful events (Cohen et al., 2000). Collectively, these group and dyadic interventions are impressive because they reveal the many ways in which it may be possible to engineer support on behalf of people in highly diverse stressful circumstances. However, to date, there is more evidence on the feasibility of marshaling support than of its effectiveness. For example, two reviews of the outcomes of support groups for family caregivers of elderly persons paint a bleak picture with respect to the attainment of desired goals (Lavoie, 1995; Toseland & Rossiter, 1989). The same is true in the context of support groups for cancer patients (Fawzy et al., 1990; Helgeson & Cohen, 1996). The authors of these reviews provide reasonable explanations for the lack of clear evidence that we can help people under stress by providing support. Nevertheless, we have not as yet been able to translate the studies of support in naturalistic settings to effective artificial interventions.

—Sheldon Cohen and
Sarah Pressman

Further Reading

- Barrera, M., Jr., Sandler, I. N., & Ramsay, T. B. (1981). Preliminary development of a scale of social support: Studies on college students. *American Journal of Community Psychology*, 9, 435-447.

- Bolger, N., Zuckerman, A., & Kessler, R. C. (2000). Invisible support and adjustment to stress. *Journal of Personality and Social Psychology, 79*, 953-961.
- Cassel, J. (1976). The contribution of the social environment to host resistance. *American Journal of Epidemiology, 104*, 107-123.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38*, 300-314.
- Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2000). Social relationships and health. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* (pp. 1-25). New York: Oxford University Press.
- Cohen, S., & McKay, G. (1984). Social support, stress and the buffering hypothesis: A theoretical analysis. In A. Baum, S. E. Taylor, & J. E. Singer (Eds.), *Handbook of psychology and health* (pp. 253-267). Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*, 310-357.
- Cutrona, C. E., & Russell, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view*. New York: John Wiley.
- Eckenrode, J. E., & Wethington, E. (1990). The process and outcome of mobilizing social support. In S. Duck (Ed.), *Personal relationships and social support* (pp. 83-103). Newbury Park, CA: Sage.
- Fawzy, F. I., Cousins, N., Fawzy, N. W., Kemeny, M. E., Elashoff, R., & Morton, D. (1990). A structured psychiatric intervention for cancer patients: 1. Changes over time in methods of coping and affective disturbance. *Archives of General Psychiatry, 47*, 720-725.
- Fisher, J. D., Nadler, A., & Whitcher-Alagna, S. (1982). Recipient reactions to aid. *Psychological Bulletin, 91*, 27-54.
- Gore, S. (1981). Stress-buffering functions of social supports: An appraisal and clarification of research models. In B. S. Dohrenwend & B. P. Dohrenwend (Eds.), *Stressful life events and their contexts* (pp. 202-222). New York: Prodist.
- Helgeson, V., & Cohen, S. (1996). Social support and adjustment to cancer: Reconciling descriptive, correlational, and intervention research. *Health Psychology, 15*, 135-148.
- House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley.
- Lakey, B., & Cohen, S. (2000). Social support theory and measurement. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* (pp. 29-52). New York: Oxford University Press.
- Lavoie, J. P. (1995). Support groups for informal caregivers don't work! Refocus the groups or the evaluations? *Canadian Journal on Aging, 14*, 580-595.
- Lepore, S. J., Silver, R. C., Wortman, C. B., & Wayment, H. A. (1996). Social constraints, intrusive thoughts, and depressive symptoms among bereaved mothers. *Journal of Personality and Social Psychology, 70*, 271-282.
- Pearlin, I. I., & Scholler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*, 2-21.
- Rosengren, A., Orth-Gomer, K., Wedel, H., & Wilhelmsen, L. (1993). Stressful life events, social support, and mortality in men born in 1933. *British Medical Journal, 307*, 1102-1105.
- Sandler, I. N., Miller, P., Short, J., & Wolchik, S. A. (1989). Social support as a protective factor for children in stress. In D. Belle (Ed.), *Children's social networks and social supports* (pp. 277-307). New York: John Wiley.
- Schwarzer, R., & Leppin, A. (1989). Social support and health: A meta-analysis. *Psychology and Health, 3*, 1-15.
- Thoits, P. A. (1986). Social support as coping assistance. *Journal of Consulting and Clinical Psychology, 54*, 416-423.
- Toseland, R. W., & Rossiter, C. M. (1989). Group interventions to support family caregivers: A review and analysis. *The Gerontologist, 29*(4), 438-448.
- Wethington, E., & Kessler, R. C. (1986). Perceived support, received support, and adjustment to stressful events. *Journal of Health and Social Behavior, 27*, 78-89.

STRESS AND HEALTH. See AIDS AND HIV; STRESS; ALLOSTATIS, ALLOSTATIC LOAD, AND STRESS; BLOOD PRESSURE, HYPERTENSION, AND STRESS; CARDIOVASCULAR REACTIVITY; CAREGIVING AND STRESS; CHILD ABUSE, CHILD NEGLECT, AND HEALTH; DISASTERS AND HEALTH; EMOTIONS: NEGATIVE EMOTIONS AND HEALTH; ENDOGENOUS OPIOIDS, STRESS, AND HEALTH; GASTRIC ULCERS AND STRESS;

SOURCE

Encyclopedia of
HEALTH
&
BEHAVIOR

2

Editor in Chief
NORMAN B. ANDERSON, PhD
American Psychological Association

2004

A Sage Reference Publication



SAGE Publications

International Educational and Professional Publisher
Thousand Oaks ■ London ■ New Delhi