



Social Support

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Direct (or Main) Effect Model A theoretical model of social support that suggests that social support enhances health and well-being irrespective of stress exposure.

Functional Support The psychological and material resources available from an individual's interpersonal relationships; types of functional support generally include instrumental (or tangible) support, emotional support, and informational support.

Social Integration A theoretical construct that refers to the extent of participation and involvement (or embeddedness) of a person in his or her social network.

Social Network A system of interpersonal relationships.

Social Support A multidimensional construct that refers to the characteristics and functions of social relationships thought to enhance mental and physical health; also, the psychological and material resources available to individuals through their social networks.

Stress-Buffering Model A theoretical model of social support that proposes that social support protects or buffers individuals from the harmful effects of stress on health and well-being, and that the beneficial effects of social support can only occur when individuals are exposed to stress.

Stressor-Resource Matching Hypothesis Proposes that for social support to have a protective effect against stress, the support resources that are perceived to be available must match the support needs that are elicited by a stressful event.

Structural Support The extent and interconnectiveness of an individual's social relationships.

SOCIAL SUPPORT is a multidimensional construct that refers to the psychological and material resources available to individuals through their interpersonal relationships. Social support is thought to have beneficial effects on both mental and physical health. This article presents a discussion of the fundamental concepts and approaches used in the study of social support and its relations to well-being. Representative studies from the social support literature are presented to illustrate key concepts as well as to provide evidence linking social support and health.

I. INTRODUCTION

A substantial body of research has documented relations between the extent and quality of social relationships and better mental and physical health. Early research revealed that individuals who were socially isolated or unmarried were more likely to commit suicide, had higher age-adjusted mortality rates from all causes of death, and higher rates of tuberculosis, accidents, and psychiatric disorders than their more socially connected and married counterparts. Having so-

cial relationships can also have negative effects on well-being, particularly when relationships become a source of stress, for example, enduring conflicts with a spouse or excessive demands and criticism from an employer. Notwithstanding the potential adverse effects of social relationships, research in the last two decades has focused primarily on socially derived health benefits. The term *social support* has been used to refer to the characteristics and functions of social relationships thought to enhance mental and physical health. Psychologists, sociologists, epidemiologists, medical practitioners, and other biomedical and social scientists continue to investigate the ways in which social support affects physical and psychological well-being. What remains unclear is which characteristics and functions of social support are most important for better health and well-being, and what the mechanisms are through which they operate.

The purpose of this article is to briefly review the psychosocial and biomedical literature that helps explain how the social environment can positively affect health and well-being. We begin by clarifying the ways that social support has been conceptualized and the basic measurement approaches used to study it. We review the prevalent theoretical models and key concepts that have guided research in this area. Findings from representative studies demonstrating ways the social environment can improve psychological and physical health are presented. Lastly, we discuss the various types of support interventions with an emphasis on support groups, citing examples from the research literature.

II. DIMENSIONS OF SOCIAL SUPPORT

Social support is a theoretically complex, multidimensional construct that has been conceptualized and measured in a variety of ways. Despite the diversity of conceptualizations and measurement strategies, the evidence that social ties have a beneficial effect on both mental and physical health is impressive. This diversity in the support literature reflects the lack of consensus within the scientific community as to a precise definition of social support. Nevertheless, the term social support generally refers to the process by which individuals manage the psychological and material resources available through their social networks to enhance their coping with stressful events, meet their

social needs, and achieve their goals. Efforts to better define social support have led to the development of several typologies of social environmental measures. The most basic of these distinguishes between measures that assess the structural characteristics of social networks (structural support) and those that assess the resources that networks provide (functional support).

Structural support measures assess the extent and interconnectedness of one's social relationships. Typical measures include marital status, the existence of friends and relatives, and membership in groups and religious organizations. The number of family members, friends, coworkers, and so on, with whom there is regular social contact is referred to as network size. Another frequently used measure of structural support, social integration, is a global index of the extent of one's social connections or embeddedness in a social network. A prototypic measure of social integration is an index that includes marital status, the number and frequency of contacts with close family and friends, participation in group activities, and church/religious affiliations. While structural support measures provide only an indirect index of the resources potentially available from one's interpersonal relationships, the structure of individuals' social networks can have important implications for the provision of support. [See SOCIAL NETWORKS.]

Functional support measures assess the availability of psychological and material resources from one's interpersonal relationships. Resources are usually differentiated in terms of three types of support: instrumental, informational, and emotional. Instrumental support involves the provision of material aid, for example, financial assistance or help with daily tasks. Informational support refers to the provision of relevant information intended to help the individual cope with current difficulties and typically takes the form of advice or guidance in dealing with one's problems. Emotional support involves the expression of empathy, caring, reassurance, and trust, and provides opportunities for emotional expression and venting.

In addition to the basic distinction between structural and functional support, other conceptual issues influence the ways in which social support is measured and understood. One issue is whether support must actually be received to be beneficial or if simply perceiving that support is available is sufficient to gain psychological and physical health benefits. It has been

shown that perceived support and received support are not strongly related and that perceived support is associated with improved emotional adjustment to stressful life experiences, while received support often is not. Because personality traits (e.g., neuroticism, extraversion, social competence) can influence perceptions of support, it is an open question as to whether it is the actual support, the personality of persons who report greater levels of support, or both that are responsible for the benefits accrued by those reporting higher levels of available support.

There are a number of other factors thought to contribute to the relation between social support and health outcomes. These include individual differences in the need or desire for support; individual characteristics of the support recipient and provider; the nature of their relationship; circumstances surrounding the support transaction (e.g., timing of support, duration of stressful event, costs of giving and receiving support); and the match between support needs and available resources. The relative importance of these and other issues in understanding the complex processes that link social support to health and well-being are yet to be fully elucidated.

III. CONCEPTUAL MODELS OF SOCIAL SUPPORT

Two alternative conceptual models explaining how social support may affect physical and psychological health have been proposed. The first model posits that support is related to well-being only (or primarily) when people are dealing with stressful events in their lives. This model is termed the *stress-buffering* model because it suggests that support “buffers” or protects people from the potentially deleterious effects of stress on mental and physical health. Statistical tests of this model are supported by an interaction between stress and support, in which support attenuates the impact of stress on health outcomes but has no effect on health in the absence of stress. The second model proposes that social support enhances well-being irrespective of peoples’ stress levels. This model is referred to as the *direct effect* (or main effect) model because it is supported by a statistical main effect of support on well-being and the absence of a stress by support interaction. Although evidence supporting both the direct effect and stress-buffering models has been reported,

these two support processes are frequently associated with different types of measures of social support. Specifically, direct effects of support are generally found when structural support measures are used, particularly social integration, whereas stress-buffering effects are more common when functional support measures are used, particularly perceived support.

The stress-buffering and direct effects models and the significance of the particular support measures most frequently associated with them are discussed in the sections that follow. We illustrate some of the conceptual issues related to each model with examples from the research literature.

A. Stress-Buffering Model

Recall that the stress-buffering model argues that social support exerts its beneficial effects in the presence of stressful events, as this is when support is needed. In this model, social support can buffer against the negative impact of stressful events in two ways. First, perceived support can intervene between the occurrence of a potentially stressful event and the experience of a psychological and physiological stress reaction by influencing appraisals of how stressful the events are. Here, perceived support may enhance individuals’ perceptions about their ability to cope with the demands imposed by an event and as such a negative event may be seen as less stressful and less potentially harmful. Second, perceived support may intervene between the experience of a stress reaction following an event and the onset of a pathological process (psychological and/or physiological) by reducing or eliminating the stress reaction. At this point, support may reduce the stress response by enhancing coping efforts to deal with both the practical and emotional consequences of the event and reducing its perceived importance. Thus, social support may protect against the potentially injurious effects of stress at different times by positively influencing individuals’ appraisals of both stressful events (i.e., as less threatening and harmful) and their ability to cope (i.e., as sufficient and effective, particularly with the help of others if needed).

In 1984, Sheldon Cohen and Garth McKay suggested that for support to lessen the adverse effects of stress on well-being, the resources that are perceived to be available must match the needs elicited by the stressful event. This prediction, known as the stressor-

resource matching hypothesis, reflects the view of stressors as events that create deficits or losses and that the nature of the loss determines the nature of the resources needed to replace that which was lost. For example, financial loss associated with involuntary unemployment would presumably elicit needs for tangible support such as financial assistance from family and friends, whereas emotional and psychological loss associated with the death of a friend would presumably elicit needs for emotional support.

In 1990, Carolyn Cutrona and Dan Russell argued that the perceived controllability of stressful events is a critical factor in matching support resources to support needs. Specifically, stressful events that are potentially controllable are thought to elicit needs for support resources that enhance the individual's ability to actively cope (for example, by problem solving or planning) with the demands imposed by the stressor. These support resources (informational and tangible support) may in turn help individuals to cope more effectively with the consequences of an event or even prevent the event from occurring. Conversely, uncontrollable events are presumed to elicit needs for resources that facilitate the emotional processing of the negative psychological impact of the stressor. In this case, support resources (emotional support) serve to facilitate the processing of negative emotions elicited by uncontrollable events, thereby helping individuals to recover from the emotional impact of such events.

Although buffering effects generally occur when the kinds of available support match the needs elicited by a stressful event, other factors such as stressors that elicit multiple needs, needs that shift over time, and the meaning of the loss created by the stressful event complicate the application of resource-matching models to real world situations. Moreover, some stressful events may elicit needs other than those for informational, emotional, and tangible resources. A special case of a stress-induced loss that creates other needs is the loss of an intimate relationship, such as the death of a spouse. Wolfgang and Margaret Stroebe have recently argued that the loss of a spouse represents not only the loss of the support they provided, but also the loss of a significant social role that comprised the individual's sense of identity, self-esteem, and self-worth. Consequently, replacing the resources traditionally thought to be depleted by stressful events (instrumental, emotional, and esteem support) may not be sufficient to buffer the effects of losing an intimate network member. This is exemplified in a recent lon-

gitudinal study of 60 widowed men and women that found that the support of friends and family could not compensate for the loss of a spouse.

Many studies have documented evidence supporting the stress-buffering model in relation to mental health outcomes. Early research in this area demonstrated buffering effects of perceived emotional support on suicide attempts in bereaved persons, psychological distress in single parents, adjustment in students returning to school, and depression in the recently unemployed, pregnant teenagers, and widows. In a review of the research on the effects of social support on mental health in community samples, four of five studies that examined interactions between perceived support and stressful life events found significant stress-buffering effects of support. For example, in a study of 320 community-dwelling adults, those with more stressful life events reported greater psychological distress. However, the relation between stressful events and distress was attenuated among those with the most potential supporters. A stress-buffering effect was also found in a study of 1809 men working in a manufacturing plant. Although higher levels of job stress were associated with greater psychological distress, this association was attenuated among men with more emotional support from spouses and coworkers (but not from supervisors and other family members). A study of 636 adults employed in a variety of occupations found similar stress-buffering effects of emotional, tangible, and informational support. Although greater job stress was associated with work related strains such as job dissatisfaction and boredom, support from family, coworkers, or friends greatly attenuated this relation. Finally, in a study of 1026 married community residents, perceived support (emotional, tangible, and informational) was found to buffer against the effects of undesirable life events on depressive symptoms among homemakers (but not among men or women in the labor force).

Other studies have examined the role of perceived support on stress-induced physical health outcomes. Most of this research has focused on the role of support for chronically ill (and therefore high stress) patients and do not include low-stress comparison groups. Outcome measures have included self-reported somatic symptoms; biologically verifiable markers of disease, such as cardiovascular events, cancer survival, pregnancy outcomes, and neuroendocrine and immune function; health behaviors, such as tobacco use, exercise, diet, and adherence to prescribed medical

treatments; and health care utilization, such as emergency room visits, number of postsurgical hospital days, and health care costs. These types of studies have documented enhanced recovery, longer survival, increased compliance, and better psychosocial adjustment in patients reporting higher levels of support (including perceived availability of emotional, instrumental, and informational support as well as membership in affiliative networks) across a range of medical populations. For example, response to rehabilitation following stroke, orthopedic disability, and myocardial infarction has been associated with greater perceived emotional and instrumental support.

Other studies have included low-stress comparison groups and hence can be used to distinguish stress-buffering from direct effects of perceived support. For example, women who reported high numbers of stressful life events before and during pregnancy experienced more pregnancy complications. However, this association was attenuated among those with social resources provided by spouse, extended family, and friends. In another study, asthmatic adults who reported high numbers of stressful life events took more asthma medication, but those reporting greater availability of social support resources were protected from stress-induced increases in medication use. Finally, in a study of recently unemployed males, perceived emotional support (from spouse, friends, and relatives) was found to buffer against the effects of unemployment-related stress on self-reported physical symptoms and on a biological measure associated with risk of coronary heart disease—serum cholesterol level. Specifically, unemployed males with low emotional support had higher serum cholesterol and more physical symptoms than those with high emotional support or those who were promptly reemployed (low stress).

A recent study examined the somatic and psychological effects of common everyday stress (or hassles) and the roles of perceived emotional support in the stress process. Seventy-five married couples completed a battery of questionnaires and were interviewed once a month for 6 months. Participants also provided daily reports (for a total of 20 days) of stress, physical health, and psychological well-being. Perceived emotional support (from spouse, close family and friends, and work supervisor combined) buffered against the negative effects of daily stress on same-day mood as well as on physical symptom reports on the day following a high stress day.

The studies just described all report findings of an

interaction of social support with stress that resulted in an attenuation of the impact of stress on some health outcome. As such, these studies provide evidence consistent with the beneficial buffering effect of perceived support on health in persons experiencing increased levels of stress. Although these studies all showed stress-buffering effects of perceived support on physical well-being, the literature also includes evidence consistent with main effects of perceived support on health, although main effects are more often found when support is indexed using measures of social integration. [See COPING WITH STRESS; STRESS.]

B. Direct Effect Model

Recall that the direct effect model proposes that having social relationships has an overall beneficial effect on individuals' health and well-being regardless of the occurrence of stressful events. In addition, direct effects are most frequently observed when structural support measures are used, particularly social integration. Direct benefits of social integration could occur because diverse social networks provide individuals with sets of stable, socially rewarded roles in the community, and regular positive interpersonal experiences. In addition, socially integrated individuals may be more likely to receive feedback from others that helps them to form their self-identities and promotes feelings of self-worth, predictability, stability, and control in their lives. Finally, direct benefits of social integration may also reflect the effect of extreme isolation for those with very few social connections.

Several epidemiological studies of community residents have reported evidence supporting direct effects of social integration on mental health. For example, in a longitudinal study of 2234 health insurance subscribers, socially integrated persons were found to have less anxiety, less depression, and greater positive well-being over a 1-year period regardless of their level of stressful life events. In a cross-sectional study examining negative life events and chronic strains (financial, marital, and work-related) in 1003 adults residing in Los Angeles, a single-item measure of the total number of close relatives and friends was also found to have a direct effect on reports of depressive symptoms. Finally, in a study of 170 Chinese American adults residing in Washington, D.C., higher scores on a social network index measure (including marital status, number of friends and relatives, membership in clubs and church, and frequency of social interactions) were

associated with less psychological distress irrespective of individuals' scores on a weighted life events inventory. The evidence provided by these and other studies suggest that being embedded in a diverse social network is directly associated with better mental health.

Although direct effects of support on health and well-being are typically found for social integration, direct effects of perceived support has also been documented. In a recent study of 1174 elderly men and women (age >50), three types of stressors (physical disability, financial strain, and undesirable life events) were included to investigate the possible buffering effects of perceived emotional support from specific sources on depressive symptoms. Although increases in all three types of stress were associated with greater depressive symptoms and greater perceived emotional support with fewer symptoms, no statistical interactions between stressors and support were found. It is possible that buffering effects were not found in this case because the measure of support tapped unspecific emotional support but did not assess support associated with a specific stressful event.

The most provocative evidence linking social integration to physical health is provided by epidemiological studies of all-cause mortality. Studies of community residents followed over an extended period of time (30 months to 12 years) have shown that initially healthy people with relatively lower levels of social integration have higher mortality rates from all causes, even after controlling for traditional risk factors such as blood pressure, cigarette smoking, and serum cholesterol. One such study followed a sample of 4775 healthy residents of Alameda County, California, for 9 years beginning in 1965. A social network index comprised of marriage, contacts with family and friends, church membership, and other group affiliations predicted mortality such that persons with fewer types of relationships were twice as likely to die as persons with more, even after statistically controlling for physical health at study onset, socioeconomic status, smoking, alcohol consumption, physical activity, obesity, race, life satisfaction, and use of preventive health services. In another study of 2059 adults in Evans County, Georgia, a similar social network index predicted mortality for an 11-to-13 year follow-up period, after statistically controlling for age and baseline measures of biomedical as well as self-reported risk factors for mortality. The relation between social integration and mortality is generally weaker for women and non-Whites

than for White men, although the data on gender differences is somewhat mixed.

Evidence that social integration predicts mortality in initially unhealthy persons also exists. For example, in a study of male survivors of acute myocardial infarction (MI) those who were less socially integrated during the 1-to-3 year post-MI follow-up period were found to have more total deaths and more sudden cardiac deaths than their more integrated counterparts. Several studies have also reported prospective associations between social integration and increased survival in patients with cancer. In one study of 118 women with breast cancer (any stage) social integration measured at study onset was related to a greater likelihood of survival over 1 to 4 years. In a study of 208 women with local and regional breast cancer, social integration measured at study onset was associated with longer survival over a 20 year follow-up period, even after controlling for stage at diagnosis, past health status, and socioeconomic status.

It is thought that persons who are embedded in a social network may benefit from a set of stable, socially rewarded roles that provide regular social interactions, a sense of predictability and stability in one's life, a source of self-esteem and self-worth, and that may help maintain positive affect. This kind of support may in turn be related to better physical health outcomes through effects on neuroendocrine or immune system functioning or on health-related behavioral patterns, such as reduced smoking and alcohol consumption, or promoting medical help seeking. Alternatively, feeling that one is valued and held in high esteem by others may influence motivation to get well and consequently increase adherence to medical regimens and improve performance of health care behaviors. [See SELF-ESTEEM.]

Although associated with survival among persons suffering from life-threatening chronic illnesses, existing studies provide little support for relations between social integration and the *onset* of specific diseases that may contribute to mortality. Only one of two studies (both of Japanese American men) found social integration associated with the onset of coronary artery disease. Neither of two studies that examined the effects of social integration on the onset of cancer found a relation. One of these studies followed 2603 men and women over 15 years. The other followed 6848 men and women over 17 years. Thus, while considerable evidence exists for an association between

social integration and total mortality, and between social integration and recovery from chronic illness, there is currently little evidence for a similar effect of social integration on the onset of physical disease.

IV. SOCIAL SUPPORT INTERVENTIONS

The purpose of support interventions is to increase the quality and/or quantity of socially derived resources. In general, support interventions attempt to create new social networks or enhance interactions with existing network members so as to optimize the match between an individual's psychosocial needs and the provision of support resources. In this section, we briefly describe the basic types of support interventions and focus on the most common among them, namely support groups. We then present several examples of intervention studies drawn from the research literature and discuss some of the factors that can influence the effectiveness of support interventions.

In theory, there are several different types of interventions that could increase the availability of social support in the face of stressful events. For example, one could train individuals to develop, maintain, and mobilize their natural support networks, or train existing network members to recognize and effectively respond to the needs of the person or persons facing a stressful challenge. However, in practice, most social support interventions have attempted to supplement existing networks by creating new networks made up of people experiencing the same stressful event, e.g., fellow cancer patients, divorcees, or widows. These "support groups" are intended to provide a level of empathy and understanding not available from others who have not experienced the same traumatic event.

Support group interventions are the most widely used and most widely studied type of social support intervention. They involve the creation of social aggregates composed of similar peers experiencing or anticipating the same or similar stressful life events or transitions. Essentially, support groups supplement or substitute for the network of ongoing social contracts that people maintain in their daily life, thereby increasing their access to support provisions. Support group interventions are based on the assumption that social comparison among similar peers can improve coping and foster adaptation. Specifically, the social comparison process facilitates the expression of nega-

tive affect, offers validation for new social identities and roles, and reduces threatening appraisals of both current and future stressors. It has been suggested that this process of social comparison is central to social support's stress-buffering role, and is in large part responsible for producing its beneficial effects on cognitive, affective, behavioral, and physiological functioning. Lastly, support group interventions typically include several steps: creating interpersonal conditions that are conducive to the expression of support needs; teaching group members how to recognize and respond to requests for support; promoting the responsive provision of support, and assessing the impact of support transactions.

There is considerable evidence to suggest that support groups can be associated with better psychosocial adjustment to stressful life changes and better health outcomes in persons with a variety of physical illnesses. Support group interventions have been applied to a variety of populations, including the bereaved, recently separated or divorced persons, children coping with parental separation, individuals with serious chronic or life-threatening illnesses (such as rheumatoid arthritis, CHD, and cancer), and persons attempting behavioral life-style changes that impact on their health, including smoking cessation, weight reduction, and abstinence from drugs and alcohol.

One reason for the ubiquity of the support group format is that it is cost-effective. This is primarily because many individuals can gain psychosocial benefits simultaneously. However, it is also because many types of support groups do not necessarily require highly trained mental health professionals to lead or facilitate them. Although many types of support groups can be led effectively by nonprofessionals, professional consultation is needed to develop group intervention protocols, screen and identify appropriate group members, and train nonprofessional group leaders to manage group processes and facilitate therapeutic communication between group members. Poorly designed and managed groups have a tremendous potential for harming the well-being of group members, and the formation of such groups should not be taken lightly or without experienced professional consultation.

Support group interventions can offer several advantages over individual (one-on-one) support interventions. These advantages include role modeling by group members for one another, learning new solutions to commonly shared problems, thereby increas-

ing members' repertoires of effective coping skills, enhanced self-esteem and self-efficacy gained through helping others, and a sense of community and belonging not available in traditional, individual intervention approaches. Conversely, participation in a support group may also expose individuals to group members who are unable to cope effectively with their stressful life circumstances and who consequently experience significant hardship and distress. This kind of exposure can precipitate negative emotional reactions among group members that can result in negative appraisals of their own coping abilities, reduced expectations about potential outcomes, and even withdrawal from the group resulting in a reduction in support. Thus, while support groups can provide emotional, informational, and esteem support, reduce feelings of isolation, enhance participants' repertoire of coping strategies, and are cost-effective, they can also have the paradoxical effect of increasing negative affect. Negative emotional reactions, including feelings of helplessness, hopelessness, and decreased feelings of control and self-esteem, are more likely to occur if there is a poor match between the individual's needs and the resources available from a support group. Negative emotional reactions can also occur if group processes and interpersonal interactions are left unchecked and allowed to create an overly critical and defensive atmosphere rather than one of mutual support and acceptance.

In addition to the careful selection of group members, the effective management of group dynamics, and the monitoring of interpersonal interactions to ensure group cohesion, the timing and duration of support group interventions have also been shown to be important factors in determining their success. The optimal timing and duration of support group interventions depends on the nature of the stressful life events or transitions that group members share. For example, some stressful life events, such as school entrance, job change, or new parenthood, are clearly time-limited and characterized by an intensive period of adjustment. Support groups for individuals facing such events should be offered at a time that coincides with the intensive period of adjustment that is required. These groups can be time-limited so as to maximize the provision of support resources when they are needed most. Other life changes and stressful experiences, such as caregiving to a relative with Alzheimer's disease or parenting a child with a physical

or mental disability, engender chronic burdens that continuously tax the adaptive resources of the affected individual. The support needs of individuals facing these types of stressors may best be met by support groups that are open-ended (not time-limited and able to accept new members at any time) and therefore able to provide ongoing support for extended periods of time.

Evidence that support groups can facilitate the process of adjustment following stressful life events has been reported in the literature. For example, one study randomized 16 couples who were parents of premature infants to either a support group or a no treatment control condition. The support groups met for 1.5 to 2 hours weekly for 7 to 12 weeks. A nurse-counselor and a veteran mother of a premature infant facilitated the support groups. The support group focused on enhancing parenting competence, the quality of mother-infant interactions, and parents' attitudes towards hospital personnel and practices. Mothers who attended the support groups touched their babies more, looked at the faces of and spoke to their infants more frequently, and visited them more often in the hospital than did mothers in the control groups. Because this intervention study included an educational component aimed at increasing parenting competence, it is unclear to what extent the results can be attributed solely to the effects of emotional support versus those of informational (education) support.

Studies have also shown benefits of group approaches to the provision of social support for patients with chronic and/or life threatening illnesses. For example, support group interventions for cancer patients have not only shown improvements in mood, psychosocial adjustment, and pain, but also in survival. One such study found that women with metastatic breast cancer who were randomly assigned to participate in a psychosocial support group lived on average 18 months longer than did those in the control group. The support groups, which met once a week for 12 months and were led by mental health professionals, focused on participants' coping efforts in dealing with cancer, their feelings about the illness, its effect on their lives, death and dying, and the development of strong supportive relationships between group members. Although this and other support intervention studies with cancer patients have shown psychological and physical health benefits, the studies are few in number and involve different intervention protocols and inter-

ventions involving multiple types of support making it difficult to identify the specific support components driving the effects. [See CANCER.]

Some studies evaluating the impact of support groups on mental and physical health outcomes fail to demonstrate beneficial effects. In a recent review of support interventions for rheumatoid arthritis patients, several studies showed no effects of support group participation on psychological or physical functioning. One of these studies compared mutual support, stress management (10 sessions each), and no-treatment control groups, and found no differences in life satisfaction, depression, or health status measures (such as joint tenderness and pain) at postintervention or 8 month follow-up assessments.

In addition to support groups, other types of support interventions have been used to enhance the provision of direct support aimed at improving health outcomes. One alternative intervention approach attempts to modify the quality of the support offered by select members of an individual's social network. Such an approach was used in a study designed to help individuals quit smoking cigarettes. The results of the study showed that married persons (or those living with a partner) enrolled in a 6-week smoking cessation program were more likely to quit smoking at the end of treatment if their partners had received minimal training on how to help them quit. Two other studies have also found evidence for the beneficial role of a partner's direct support for quitting in both cessation and short-term maintenance of smoking abstinence.

In another study, a program of education and support was designed to focus on shifting families toward a calmer, more accepting, and tolerant style of interacting with a schizophrenic family member. This intervention was based on evidence that schizophrenics are more likely to experience psychotic relapses following periods of frequent contact with close relatives who express highly critical or emotionally overinvolved attitudes towards them. These investigators found that more patients from the experimental group remained free of psychotic relapse at follow-up and more of their relatives shifted from high to low levels of expressed emotion than did families in the control group.

The studies presented in the preceding paragraphs all attempted to enhance both the quantity and quality of direct support provided by the members of individuals' social networks (either preexisting or newly created), thereby improving the match between individ-

uals' support needs and available support resources. Many of these studies have found beneficial effects of various types of support interventions on psychosocial and health outcomes, including the quality of mother-infant interactions, psychosocial adjustment and survival in women with breast cancer, smoking cessation, and lower rates of psychotic relapse in schizophrenic patients. However, most intervention studies fail to measure perceived support, making it difficult to know whether they actually succeeded in enhancing support or if observed effects are due to other factors. In addition, relatively little thinking has been done about the potential negative consequences of support interventions. Indeed, research into self-help groups suggests that at certain times and for certain people, social comparisons with others who are better or worse off may actually impede psychosocial adjustment. Finally, while emotional support is thought to be of primary importance in explaining the beneficial effects of support interventions, many of them include strong educational components, making it difficult to know which components are most responsible for the observed effects. Future research should seek to develop theoretically based interventions that permit the differentiation of the effects of specific intervention components on mental and physical health outcomes.

V. CONCLUSION

Social support is a theoretically complex, multidimensional construct that has been conceptualized and measured in a variety of ways. Despite the diversity of conceptualizations and measurement strategies, the evidence that social ties have a beneficial effect on both mental and physical health continues to grow. There is considerable evidence for both the stress-buffering and main effects of support on health and well-being. Moreover, it is clear that having diverse social ties and perceiving that support resources are available are often health enhancing. Even though there is considerable evidence for the potentially positive effects of social support, we still lack an integrated coherent theory of how such support operates in the context of complex real-life situations. As a result, our attempts at providing support through intervention programs have been limited and although promising, only partly successful. Translating theory to intervention is often cumbersome, and efficient and effective

ways of intervening in the networks of persons confronting traumatic life events are still only partially fulfilled promises.

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