

Pathways Between Social Support, Family Well Being, Quality of Parenting, and Child Resilience: What We Know

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We contribute to the theoretical and research knowledge base regarding the pathways between parental social support, family well being, quality of parenting, and the development of child resilience in families with a child with serious emotional problems. Little conceptual development has been done that provides a theoretical framework for studying the relationships among these variables. We identify key findings from social support theory and research, including the impact of social support on family well being and the parents' capacity to parent, and the experience of parental social support in families with a child with a disability. We review the constructs of family well being, quality of parenting, and child resilience. Further, we explain the pathways between parental social support, family well being, quality of parenting, and child resilience in families with a child with serious emotional problems. Key variables of the model and the nature of their inter-relationships are described. Social support is constructed as a protective mechanism with main and buffering effects that can impact family well being, quality of parenting, and child resilience at a number of junctures. The conceptual model's implications for future theory development and research are discussed.

KEY WORDS: social support; family well being; quality of parenting; child resilience; children with serious emotional problems.

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The Surgeon General's Report on Mental Health (U.S. Department of Health and Human Services, 1999) attested to the challenging role faced by any parent or caregiver of a child with a serious emotional or behavioral problem. The importance of valuing the families of these youth, building on their strengths, and having available an array of social supports has been widely endorsed in the children's mental health field (Cheney & Osher, 1997; Karp, 1993; Koroloff, Friesen, Reilly, & Rinkin, 1996). More recently, the New Freedom Commission on Mental Health set forth the goal that an individualized plan of care will be developed for every child with a serious emotional disturbance (SED), giving children and their families the opportunity to construct and maintain productive and healing partnerships (New Freedom Commission on Mental Health, 2003).

Despite the recognition of the importance of social support, little theoretical work has been done that provides a conceptual framework for understanding the relationships between parental social support, family well being, parenting capacity and child resilience. In this paper, we contribute to an understanding of the pathways by which social support to parents with a child with serious emotional problems can develop and strengthen child resilience. The term parent includes anyone who is in a caregiver role for a child with serious emotional problems, including kinship caregivers and foster and adoptive parents. The term social support is limited to informal support, defined as social support provided to a person by unpaid individuals such as relatives, friends, neighbors, and peers.

We begin with the selection and description of a theoretical framework of family functioning, and then review general literature on social support, research on social support to parents with a child with a disability, and social support to parents with a child with emotional problems. Next, we examine the constructs of family well being, quality of parenting, and child resilience. Finally, we propose a model to explain the pathways between parental social support, family well being, quality of parenting, and child resilience in families with a child with serious emotional problems. We conclude with the model's implications for future theory development and research.

THEORIES REGARDING FAMILY FUNCTIONING

While a number of theoretical frameworks have been used to explain how families function, during the 1980s, many theorists and researchers adapted a process model of stress and coping. Recently, a number of theorists (Asarnow & Horton, 1990; Beresford, 1994; McDonald, Gregoire, Poertner, & Early, 1997) have returned to process models of stress and coping to explain family functioning by combining Lazarus and Folkman's (1984) psychologically-oriented perspective regarding personal stress with sociological studies on family stress (Hill, 1958; McCubbin & McCubbin, 1987). In these elaborations, coping is conceived as a complex interaction between the individual and the environment, with the

goal of management of stress rather than mastery. Coping resources and the use of coping strategies moderate vulnerability to the effects of stress. Within the domain of coping resources, the process model acknowledges the contribution of both personal coping resources, such as physical health, ideological beliefs, and intelligence, and socio-ecological factors including social support, the marital relationship, concrete resources, and economic viability (Beresford, 1994).

The process model of stress and coping is used because the model emphasizes that variables such as social support, child characteristics, and family well being are transactional; that is, that the nature of the stressor, the personality characteristics and other attributes of the actors, and the types and sources of available coping resources influence how the factor functions (Antonucci & Jackson, 1990; Bott, 1971; Lepore, 1997). In addition, the process model does not blame or attribute responsibility to an individual; the model assumes that each individual is managing stress to the best of his or her ability.

THE CONCEPT OF SOCIAL SUPPORT

Gottlieb (1983, p. 28) defined social support as “verbal and non-verbal information or advice, tangible aid, or action that is proffered by social intimates or inferred by their presence and has beneficial emotional or behavioral effects on the recipients.” This definition made a conceptual distinction between different categories of social support (Antonucci & Jackson, 1990; Gottlieb, 1983; Heller, Price, & Hogg, 1990; Pearlin, Lieberman, Menaghan, & Mullan, 1981). The types of social support include instrumental, emotional, informational, tangible aid, positive social interaction, affection, and esteem (Cutrona & Suhr, 1992; Sherbourne & Stewart, 1991; Yu, Lee, & Woo, 2004).

Several other dimensions of social support theory are useful to distinguish. Many theorists have emphasized that social support is transactional, that is, that the nature of the stressor, the personality characteristics and other attributes of the recipient of social support, and the types and sources of available social support influence how social support functions (Antonucci & Jackson, 1990; Bott, 1971; Lepore, 1997). Another relevant contribution to social support theory is the concept of stress mediators, also known as coping resources (Lazarus & Folkman, 1984). Stress mediators are variables that individuals can use on their behalf in the presence of stress. The availability of a stress mediator makes an individual more resistant to the adverse effects of stress. On the other hand, the absence of a coping resource can make an individual more vulnerable to stress (Beresford, 1994).

Social support theory proposes two major models, the main effect and the buffering effect, to explain the association or pathways between social support and well being. The main effect model proposes that social support, defined as social integration or social embeddedness, has a beneficial effect on well being

whether or not the person is under stress. The buffering model hypothesizes that social support protects individuals from the potentially harmful effects of stressful events. At least two junctures have been identified where social support can have a buffering effect: between stressor and distress, and between stress and health or mental health outcome.

Social Support to Parents with a Child with a Disability

Relatively little research has been conducted on the use of coping mechanisms, including social support, by parents caring for a child with a disability of any nature (Eiser, 1990). Dunst and Trivette (1986) examined the mediating influence of social support on families with children with mental retardation, physical disabilities, and developmental risks. Parental satisfaction with support was the only main effect variable on parental well being. Findings also indicated that a supportive network mediates the degree of parents' protectiveness of their children as well as their perception of the difficulty of their child's behavior. In families with children with developmental disabilities, results indicated that the degree of support available from spouse and friends is significantly associated with the level of satisfaction with family functioning (Snowden, Cameron, & Dunham, 1994). Similar findings regarding a positive relationship between social support at times of crisis and current satisfaction with life were reported in a study of families with a child with a severe physical disability (Sloper & Turner, 1993).

An early ethnographic study of families with a child with a progressive neuromuscular disorder identified a range of coping strategies used by the parents, such as the development and cultivation of coping resources, including social support, and coping strategies that were specifically directed at "resource maintenance" (Bregman, 1980). A matched comparison study found that families with a child with spina bifida had smaller social networks (i.e. fewer friends) and greater boundary density (proportion of network connections between the two parents' social networks) than families with a child without a disability (Kazak & Wilcox, 1984).

The impact of acute vs. chronic parenting stress was specifically evaluated in a study of parents caring for a child who is hearing impaired (Quittner, Glueckauf, & Jackson, 1990). A buffer effect was not indicated but evidence was found for a mediating effect of social support on maternal stress through the paths of perception of competence and role restriction. Explanations for the lack of a buffering effect under chronic stress include the conservation of resources theory (Hobfoll & Freedy, 1990) which assumes that individuals attempt to conserve the quality and quantity of their resources, and the cost of coping hypothesis, which states that stressors and social support are not always independent factors, especially under chronic stress situations (Lepore, 1997). In summary, chronic stress may affect and limit both help-seeking behavior and support provision (Gottlieb, 1992).

Caregiver stress and coping resources are variables examined in one of the few research studies on stress and coping in families with a child with an emotional disability (McDonald et al., 1997). Findings indicated that increases in the perception of the child as making a positive contribution to the family, as well as informal supports from family, friends, and community, mediate the impact on caregiver stress by enhancing the caregiver's coping resources.

THE CONCEPT OF FAMILY WELL BEING

Research on well being and life satisfaction has emerged over the past 20 years, beginning with the use of national survey designs and social indicators of subjective well being. Quality of life, defined as "how well one feels his or her important needs, goals, and wishes are being satisfied" (Crowley & Kazdin, 1998) fits within the metaconstruct of subjective well being. Camara and Resnick (1987) identified four family processes that may mediate the effects of divorce on children's social and emotional functioning: interparental conflict, interparental cooperation, and father-child and mother-child relationships. Lewis and Wallerstein (1987) studied families 10 years post-divorce and identified five profiles of family functioning: remarriage history, socioeconomic status, feelings of anger, parental happiness, and rejection of parenting. Frey, Greenberg, and Fewell (1989) used the process model of stress and coping to examine how child characteristics, social networks, parental belief systems and coping styles related to parent outcomes. In the domain of family well being, the dimensions covered were family cohesion, family expressiveness and conflict, harmony of family life, and parental agreement regarding child rearing.

Family well being has also been defined in the development of assessment instruments. The Child and Adolescent Burden Assessment, an instrument developed to measure family burden resulting from a child's mental health problems, includes the domains of economic cost, impact on family relationships (previous or current partner, with other children, between other children, other children's behavior), impact on other relationships (with other family members and friends), restrictions on personal and social activities, stigma, psychological adjustment (feelings of depression, tiredness, worries), and feelings of competence to deal with the child's problems (Farmer, Burns, Angold, & Costello, 1997; Messer, Angold, Costello, & Burns, 1996). The Effects of the Situation Questionnaire, a caregiver-completed instrument, assumes that the family's caregiving experience will include both stresses, defined as internal experiences of difficulty or distress, and enrichment, described as enhancements to the parents' quality of life on a daily basis (Yatchmenoff, Koren, Friesen, Gordon, & Kinney, 1998).

Cowen (2000) reviewed previous literature and identified four input variables that promote child wellness: caregiver variables, family milieu variables (healthy

partner relationship, good relationships among family members), child variables, and absence of major stressors.

The domain of family well being, then, includes the dimensions of the family's organizational structure, interpersonal relationships, parent psychological status, and parent self-efficacy. Family organizational structure refers to the family's cohesion, harmony, agreement regarding caregiving, and expressiveness and conflict. The area of interpersonal relationships includes both family relationships (previous or current partner, with other children, between other children, other children's behavior) and relationships with other family members and friends. Parent self-efficacy is defined as the parent's sense of competence in dealing with their child's problems.

THE CONCEPT OF QUALITY OF PARENTING

Traditional theories of child development emphasize the role of the primary caregiver, especially during the child's first year of life, in establishing the basis for the infant to develop healthy attachments, a sense of self, and a sense of self-efficacy (Bowlby, 1969). Building on social learning theory, the development of self-efficacy, defined as "judgments of how well one can execute courses of action required to deal with prospective situations," is viewed as central to human agency, self-regulation, and a child's choice of activities and environments (Bandura, 1982). The quality of parenting continues to play a key role throughout the child's development, interacting with the child characteristics and behavior, and the family's sociocultural context.

Several studies of child resilience demonstrated a significant relationship between quality of caregiving and a child's ability to adapt to adversity (Masten, Morison, Pellegrini, & Tellegen, 1990; Werner, 1993; Werner & Smith, 1992). Grolnick (1989) and Reid (1993) concluded that a number of risk factors are mediated effectively by the quality of parenting. The family process model of stress and coping (Beresford, 1994) included parenting skills as a personal coping resource for families caring for a child with disabilities. Wyman, Sandler, Wolchik, & Nelson (2000) noted that studies have distinguished key dimensions of parenting quality including child supervision, consistent structure and discipline, parent attitudes and active involvement, and clear family communication patterns.

Parents' use of structure and discipline has been examined in several studies. Patterson, DeBaryshe, & Ramsey, (1989) supported a social interaction model; proposing that ineffective parents do not reward prosocial behaviors and do not use effective punishment for antisocial behavior. In a review of longitudinal and treatment studies regarding conduct disorder Reid (1993) emphasized the importance of effective discipline strategies and supervision in the prevention of conduct disorder. Research conducted by Webster-Stratton, Kolpacoff, and Hollingsworth (1989) indicated that parents can be taught effective parenting, including consistent

discipline and control, development of the child's social processing skills, and effective supervision outside of the home.

A final dimension of quality of parenting and family well being is the contribution of child characteristics and behavior. A number of studies have demonstrated that a reciprocal relationship exists between parenting quality and the child's personality and behavior (Crockenberg, 1981; Crowley & Kazdin, 1998; Grolnick, 1989; Steinberg, 1989). In a study of the factors that determine aggressive behavior development in adolescent boys, the youth's temperament was one of four variables that contributed to the development of aggressive behavior (Olweus, 1980). Further analyses indicated that the youth's temperament had an indirect effect through the mother's permissiveness of aggression. The author speculates a reciprocal relationship (i.e., an overly active child may exhaust the mother, who then becomes more permissive of aggressive behavior).

THE CONCEPT OF CHILD RESILIENCE

In the mid-1970s, results were published of a series of longitudinal coping studies that began in 1953 with 128 normal infants (Murphy & Moriarty, 1976). Throughout the infancy and childhood of these subjects, researchers observed both differing internal physiological ways to reduce tension and differing capacities for seeking and accepting help from the environment. In exploring how this "resilience" develops, the authors make the observation that stress evokes added energy—the inoculation effect observed when a child masters a stressful event. Around this same time, the Kauai Longitudinal Study (Werner & Smith, 1982) defined resilience as the capacity to cope effectively with internal and external stresses. The Mother-Child Project conceptualized resilience within the framework of an organizational and developmental perspective as a process; a capacity to successfully master stage-specific developmental issues that develops over time through transactions of the individual with the environment (Egeland, Carlson, & Sroufe, 1993).

Masten (2001), Luthar et al. (2000), and Rutter (1990) proposed that the construct of child resilience includes two essential factors, the presence of serious threats to adaptation or development, and the achievement of positive adaptation and good outcomes. A developmental perspective, a common theme in theoretical frameworks for child resilience, takes into account the child's developmental level and functioning, the multiple levels of influence on a child's developmental pathways, and the reciprocity between the risk and protective factors and the child's adjustment. A related realization is that resilience in children occurs through normal human adaptive processes, including the development of cognition, regulation of behavior, and interactions with caregivers and the environment (Masten, 2001).

Risk Factors

The concept of resilience includes the presence of serious threats to child development. The phenomenon of resilience emerged from the study of risk factors in disciplines such as epidemiology and developmental psychopathology (Cicchetti & Toth, 1997; Masten et al., 1990; Rutter, 1990). Risk factors describe those circumstances that increase the likelihood that a child will experience negative outcomes and problem behaviors. There is considerable agreement that risk factors can be found within the child, the family, the neighborhood, and in societal structures.

In a study using data from the Ontario Child Health Study, the risk factor with the highest relative odds for presence of a child psychiatric disorder was family problems (Rae-Grant, Thomas, Offord, & Boyle, 1989). There is some evidence that boys are more vulnerable to stressors in the first decade of life; in the second decade girls are more susceptible to risks; and males are more vulnerable in the third decade (Werner & Smith, 1992). The National Institute of Mental Health recently convened an expert panel and conducted an extensive literature review of family risk factors for children's externalizing behavior problems. The evidence-based malleable risk factors identified were lower levels of parental engagement, greater use of invalidation, and harsh and inconsistent discipline (Hann & Borek, 2001).

Conceptual clarity is important in the measurement of risk if we are to understand child resilience. First, research studies should not assume that a risk factor has equivalent levels of risk for all children (Luthar, 1993); or that risk is based on the presumed presence of a stressor, such as having a parent with mental illness. Second, the mediational model of stress heightens the need to consider the effects of risk factors in conjunction with one another, rather than in isolation (Gore & Eckenrode, 1994).

Protective Factors and Processes

The other core characteristic of child resilience is the processes that mediate the relationship between stress and competence. There is disagreement regarding the nature of these processes, except for the belief that they are related to the presence of protective factors or mechanisms. Substantial main effects have been found for parenting qualities, intellectual functioning, socioeconomic status, and positive self-perceptions (Masten, 2001).

Since the mid-1980s, there has been a recognition of the presence of protective factors as those influences that modify, ameliorate, or alter a person's response to stressors (Smith & Carlson, 1997). Rak and Patterson (1996) reviewed several studies and identified a number of protective factors within the child and the family. At the child level, protective factors included an active approach to

problem-solving, the ability from infancy on to gain the positive attention of others, an ability to be alert and autonomous, the tendency to seek out novel experiences, and an optimistic view even in the face of distressing experiences. At the family level, protective factors included the age of the opposite sex parent, consistent nurturing during the first year of life, alternative caretakers who step in when parents are not present, a multi-age network of relatives, the presence of sibling caretakers, and structure and rules during adolescence.

Several theories have been proposed to explain how protective factors increase resilience in children. Rutter (1990) identified four mediating mechanisms in protective processes: mechanisms that directly reduce the impact of risk exposure, mediating factors that stop or reduce the impact of risk chains, the development of a child's self-esteem, and turning points and the opening up of new opportunities. More recently, Rutter added four more protective mechanisms: protective processes that reduce sensitivity to risk, an increase of positive chain reactions, compensatory positive experiences that counter the effects of risk, and positive cognitive processing of negative events (Rutter, 1995). A related phenomenon is the ability of some children to actively generate and create experiences that foster competence (Masten et al., 1990; Murphy & Moriarity, 1976; Werner & Smith, 1992).

CONCEPTUAL MODEL

Figure 1 depicts a conceptual model for describing the pathways between personal and environmental stressors and characteristics, social support, family well being, quality of parenting, and child resilience. The domains describe the key variables that affect family functioning and child resilience. The arrows between the domains represent the interactions in one or both directions between the domains.

The column on the left side of the model depicts "what is," i.e., the environmental, child, and parental characteristics and stressors that are found in every family, including a family with a child with emotional and behavioral problems. As noted by the bi-directional arrows within this column, these characteristics and stressors influence one another. For example, child successes and stressors, such as a child's problems in school, have an affect on a parent's sense of mastery. As noted earlier, parental mental illness may act as a risk factor to a child's well being.

Parental social support, shown in the second column of the model, is viewed as a mediator and coping resource with both main effects and buffering effects. The impact of the main effect is limited to family well being, with the assumption that social integration and a sense of belonging contribute to a family's sense of wellness. Emotional and esteem support, concrete aid, and problem solving have both direct and indirect buffering effects on family well being, quality of

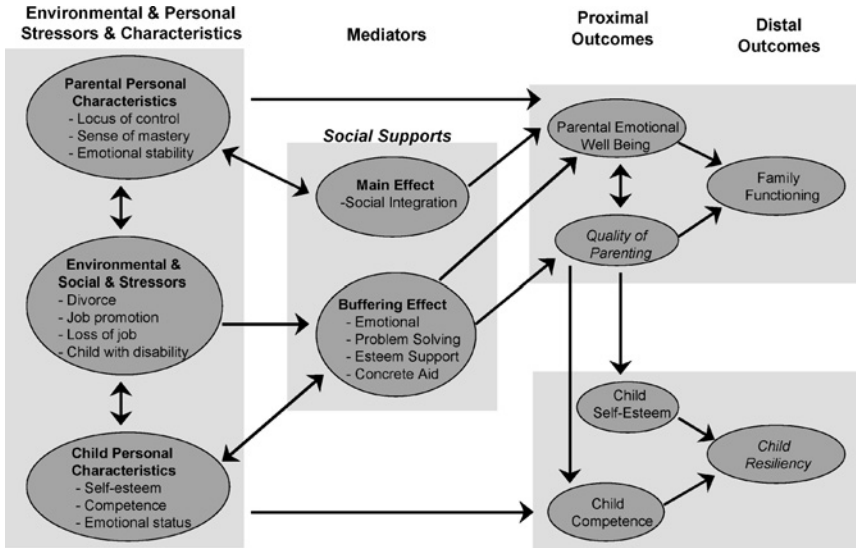


Fig. 1. Conceptual model.

parenting, and child resilience. For example, assistance with problem solving can contribute to a parent’s quality of parenting, which in turn will affect a child’s sense of competence.

DISCUSSION

Little conceptual development or research has been conducted that specifically investigates the relationships between parental social support, family well being, parenting capacity and child resilience in families with a child with serious emotional problems. Perhaps due to the limited knowledge base, the role of social support is seldom assessed or introduced into interventions with individuals and families who experience chronic stress, such as families with a child with serious emotional problems. A distinct set of research issues is present when studying social support in families with a child with a disability. Coyne, Ellard, and Smith (1990) recommended that more qualitative methods be used so that parents can describe their experience of social support without the constraints of categories or theoretical frameworks. Beresford (1994) asserted the importance of using both qualitative and quantitative methods because there are so many unanswered questions regarding how these families use coping resources, including social support. Standardized measures need to assess the resource maintenance strategies used by families experiencing the chronic strain of caring for a child with serious emotional problems. In addition, many standardized instruments fail to incorporate the

positive contributions that a child with serious emotional problems may make to family functioning and his/her own resilience. Finally, given the complexity of the concept of social support, both conceptual frameworks and research designs need to recognize that causal processes may be operating in reverse, and that factors should be considered as both dependent and independent variables.

The conceptual model of the pathways between parental social support, family well being, quality of parenting and child resilience is congruent with an ecological perspective that emphasizes strengths, health, competence and empowerment. Research reported elsewhere validates the concepts and relationships proposed in this model (Armstrong, 2003). Much more, however, needs to be done. Further understanding of the role of parental social support as a protective mechanism for child resilience can make a substantive contribution to our understanding of effective prevention, assessment, and intervention models for families, including those with a child with serious emotional problems.

REFERENCES

- Antonucci, T. C., & Jackson, J. S. (1990). The role of reciprocity in social support. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 173–198). New York: John Wiley & Sons.
- Armstrong, M. I. (2003). *An empirical study: A model of the pathways between social support, family well being, parenting quality, and child resilience*. Unpublished Dissertation, Memorial University of Newfoundland, St. John's, Newfoundland.
- Asarnow, J. R., & Horton, A. A. (1990). Coping and stress in families of child psychiatric inpatients: Parents of children with depressive and schizophrenia spectrum disorders. *Child Psychiatry and Human Development*, *21*, 145–157.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*(2), 122–147.
- Beresford, B. A. (1994). Resources and strategies: How parents cope with the care of a disabled child. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *35*, 171–209.
- Bott, E. (1971). *Family and social network: Roles, norms and external relationships in ordinary urban families*. New York: The Free Press.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment* (Vol. 1). New York: Basic Books.
- Bregman, A. M. (1980). Living with progressive childhood illness: parental management of neuromuscular disease. *Social Work in Health Care*, *5*, 387–408.
- Camara, K. A., & Resnick, G. (1987). Marital and parental subsystems in mother-custody, father-custody, and two-parent households: Effects on children's social development. In J. P. Vincent (Ed.), *Advances in family intervention, Assessment, and theory* (Vol. 4, pp. 165–196). Greenwich, CT: JAI Press Inc.
- Cheney, D., & Osher, T. (1997). Collaborate with families. *Journal of Emotional and Behavioral Disorders*, *5*, 36–44.
- Cicchetti, D., & Toth, S. L. (1997). Transactional ecological systems in developmental psychopathology. In J. R. Weisz (Ed.), *Developmental psychopathology: Perspectives on adjustment, risk, and disorder* (pp. 317–349). Cambridge: Cambridge University Press.
- Cowen, E. L. (2000). Psychological wellness: Some hopes for the future. In R. P. Weissberg (Ed.), *The promotion of wellness in children and adolescents* (pp. 309–339). Washington, DC: CWLA Press.
- Coyne, J. C., Ellard, J. H., & Smith, D. A. F. (1990). Social support, interdependence, and the dilemmas of helping. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 129–149). New York: John Wiley & Sons, Inc.
- Crowley, M. J., & Kazdin, A. E. (1998). Child psychosocial functioning and parent quality of life among clinically referred children. *Journal of Child and Family Studies*, *7*, 233–251.

- Cutrona, C. E., & Suhr, J. A. (1992). Controllability of stressful events and satisfaction with spouse support behaviors. *Communication Research, 19*, 154–174.
- Dunst, C. J., & Trivette, C. M. (1986). Mediating influences of social support: Personal, family, and child outcomes. *American Journal of Mental Deficiency, 90*, 403–417.
- Eiser, C. (1990). *Chronic childhood disease: An introduction to psychological theory and research*. Cambridge: Cambridge University Press.
- Farmer, E. M. Z., Burns, B. J., Angold, A., & Costello, E. (1997). Impact of children's mental health problems on families: Relationships with service use. *Journal of Emotional and Behavioral Disorders, 5*, 230–238.
- Frey, K. S., Greenberg, M. T., & Fewell, R. R. (1989). Stress and coping among parents of handicapped children: A multidimensional approach. *American Journal on Mental Retardation, 94*, 240–249.
- Gore, S., & Eckenrode, J. (1994). Context and process in research on risk and resilience. In M. Rutter (Ed.), *Stress, risk, and resilience in children and adolescents: Processes, mechanisms and interventions* (pp. 19–63). Cambridge, United Kingdom: Cambridge University Press.
- Gottlieb, B. H. (1983). *Social support strategies*. Beverly Hills: Sage Publications.
- Gottlieb, B. H. (1992). Quandaries in translating support concepts to intervention. In U. Baumann (Ed.), *The meaning and measurement of social support* (pp. 293–309). New York: Hemisphere Publishing Corporation.
- Hann, D. M., & Borek, N. (Eds.). (2001). *Taking stock of risk factors for child/youth externalizing behavior problems*. Rockville, MD: Department of Health and Human Services.
- Heller, K., Price, R. H., & Hogg, J. R. (1990). The role of social support in community and clinical interventions. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 482–508). New York: John Wiley & Sons.
- Hobfoll, S. E., & Freedy, J. R. (1990). The availability and effective use of social support. *Journal of Social and Clinical Psychology, 9*, 91–103.
- Karp, N. (1993). Collaboration with families: From myth to reality. *Journal of Emotional and Behavioral Disorders, 2*, 21–23.
- Kazak, A. E., & Wilcox, B. L. (1984). The structure and function of social support networks in families with handicapped children. *American Journal of Community Psychology, 12*, xxx–xxx.
- Koroloff, N. M., Friesen, B. J., Reilly, L., & Rinkin, J. (1996). The role of family members in systems of care. In B. A. Stroul (Ed.), *Children's mental health: Creating systems of care in a changing society* (pp. 409–426). Baltimore, MD: Paul H. Brooks Publishing Company.
- Lazarus, R. S., & Folkman, S. (1984). Coping and adaptation. In W. D. Gentry (Ed.), *Handbook of behavioral medicine*. New York: The Guilford Press.
- Lepore, S. J. (1997). Social-environmental influences on the chronic stress process. In B. H. Gottlieb (Ed.), *Coping with chronic stress* (pp. 133–156). New York: Plenum Press.
- Luthar, S. S. (1993). Annotation: Methodological and conceptual issues in research on childhood resilience. *Journal of Child Psychology and Psychiatry, 34*, 441–453.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227–238.
- Masten, A. S., Morison, P., Pellegrini, D., & Tellegen, A. (1990). Competence under stress: Risk and protective factors. In S. Weintraub (Ed.), *Risk and protective factors in the development of psychopathology* (pp. 236–256). Cambridge: Cambridge University Press.
- McDonald, T. P., Gregoire, T. K., Poertner, J., & Early, T. J. (1997). Building a model of family caregiving for children with emotional disorders. *Journal of Emotional and Behavioral Disorders, 5*, 138–148.
- Messer, S. C., Angold, A., Costello, E. J., & Burns, B. J. (1996). The child and adolescent burden assessment (CABA): Measuring the family impact of emotional and behavioral problems. *International Journal of Methods in Psychiatric Research, 6*, 261–284.
- Murphy, L. B., & Moriarity, A. E. (1976). *Vulnerability, coping, and growth from infancy to adolescence*. New Haven, CT: Yale University Press.
- New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America* (DHHS Pub. No. SMA-03-3832). Rockville, MD: U. S. Department of Health and Human Services.
- Olweus, D. (1980). Familial and temperamental determinants of aggressive behavior in adolescent boys: A causal analysis. *Developmental Psychology, 16*, 644–660.

- Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist*, *44*, 329–335.
- Pearlin, L. I., Lieberman, M. A., Menaghan, E. G., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior*, *22*, 337–356.
- Quittner, A. L., Glueckauf, R. L., & Jackson, D. N. (1990). Chronic parenting stress: Moderating versus mediating effects of social support. *Journal of Personality and Social Psychology*, *59*, 1266–1278.
- Rae-Grant, N., Thomas, B. H., Offord, D. R., & Boyle, M. H. (1989). Risk, protective factors, and the prevalence of behavioral and emotional disorders in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, *28*, 262–268.
- Reid, J. B. (1993). Prevention of conduct disorder before and after school entry: Relating interventions to developmental findings. *Development and Psychopathology*, *5*, 243–262.
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In S. Weintraub (Ed.), *Risk and protective factors in the development of psychopathology* (pp. 181–214). Cambridge: Cambridge University Press.
- Rutter, M. (1995). Psychosocial adversity: Risk, resilience and recovery. *South African Journal of Child and Adolescent Psychiatry*, *7*, 75–88.
- Sherbourne, C. D., & Stewart, A. L. (1991). The MOS Social Support Survey. *Social Science and Medicine*, *32*, 705–714.
- Sloper, P., & Turner, S. (1993). Risk and resistance factors in the adaptation of parents of children with severe physical disability. *Journal of Child Psychology and Psychiatry*, *34*, 167–188.
- U.S. Department of Health and Human Services. (1999). *Mental Health: A Report of the Surgeon General*. Rockville, MD: U. S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- Webster-Stratton, C., Kolpacoff, M., & Hollingsworth, T. (1989). Self-administered videotape therapy for families with conduct-problem children. Comparison with two cost-effective treatments and a control group. *Journal of Consulting and Clinical Psychology*, *56*, 558–566.
- Werner, E. E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai Longitudinal Study. *Development and Psychopathology*, *5*, 503–515.
- Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca: Cornell University Press.
- Wyman, P. A., Sandler, I. N., Wolchik, S., & Nelson, K. (2000). Resilience as cumulative competence promotion and stress protection: Theory and intervention. In R. P. Weissberg (Ed.), *The promotion of wellness in children and adolescents* (pp. 133–184). Washington, DC: CWLA Press.
- Yatchmenoff, D. K., Koren, P. E., Friesen, B. J. J., Gordon, L. J., & Kinney, R. F. (1998). Enrichment and stress in families caring for a child with a serious emotional disorder. *Journal of Child and Family Studies*, *7*, 129–145.
- Yu, D. S. F., Lee, D. T. F., & Woo, J. (2004). Psychometric testing of the Chinese version of the Medical Outcomes Study Social Support Survey (MOS-SSS-C). *Research in Nursing and Health*, *27*, 135–143.