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Following a brief explanation of the study of social support in families, the paper presents a selective list of measures of social support as well as a number of different outcome measures that support has been found to mediate. Key terms, (social networks, social support, well-being and stress, coping) are defined and research is cited to substantiate the contention that support mediates different outcomes. A matrix is then presented of approximately 100 measures of social support and other parent/family behavior characteristics. The matrix illustrates which scales measure which outcome variables. Another matrix presents reliability and validity information for selected scales. The final section provides 204 citations for the measurement scales and reports cited in the matrices and research referred to in the narrative. (CL)
A GUIDE TO MEASURES OF SOCIAL SUPPORT AND FAMILY BEHAVIORS

by

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Helene Corradino, Project officer to TADS, Office of Special Education Programs U.S. Department of Education

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September 1985
A GUIDE TO MEASURES OF SOCIAL SUPPORT AND FAMILY BEHAVIOR

The impact of social support on intrapersonal stress, emotional and physical well-being, coping, and other behavior characteristics of parents and families is becoming an area of intense empirical investigation. Social network theory (Caplan, 1974, 1976; Cochran & Brassard, 1979; Mitchell & Trickett, 1980) and ecological psychology (Bronfenbrenner, 1974, 1977, 1979; Hobbs, 1966, 1975; Holahan, 1977) have spurred this interest.

According to social network theories, social support mediates the characteristics of a host of behaviors. According to ecological psychology, events in different social units and settings do not occur in isolation but rather affect one another directly and indirectly. Together, both conceptual frameworks (ecological psychology and social network theory) suggest that social support provided by members of different ecological and social units can proactively affect an individual's behavior, attitudes, values, and expectations.

The study of the relationship between social support and variables it mediates requires that we be able to measure adequately different aspects and dimensions of support (independent or predictor variables) and the outcomes they affect (dependent variables). Likewise, the use of social support as an intervention requires that we use reliable and valid measures of support in order to identify where help and assistance is lacking and needed. This paper presents a selective list of measures of social support and a number of different outcome measures that support has been found to mediate. Some reliability and validity data are also presented.

This monograph is divided into the following four sections:

- definitions of key terms (social networks, social support, well-being, stress, and coping) and a brief review of evidence to substantiate the contention that support mediates different outcomes
- matrix of measurement instruments and the dimensions of support or behavior outcomes they assess
Social Networks

Social networks have long been viewed as powerful mediators of social support (Mitchell & Trickett, 1980). Mitchell (1969) defined a social network as a "specific set of linkages among a defined set of persons" (p. 12). Bott (1971) defined social networks as "all or some of the social units (individuals or groups) with whom an individual is in contact" (p. 320).

Characteristics of social networks. Social networks have certain properties that make possible the quantification of links and bonds between persons and groups; thus, they are amenable to empirical investigation. The structural characteristics of social networks include:

- size of the network (number of individuals with whom a target person has direct contact)
- network density (extent to which members of a network contact a target person and each other)
- degree of connectedness (the number of network members who know and interact with one another)

Social networks can also be described in terms of the nature of links among network members. These features include:

- intensity (strength of ties between network members)
- durability (degree of stability of network relationships)
- multidimensionality (total number of different functions performed by network members)
- directedness and reciprocity (extent to which assistance and help is both given and received)
- relationship density (extent to which different network members serve different support roles)
- dispersion (ease with which a target person makes contact with his or her network members)
Social networks can also be described in terms of the physical (and psychological) distance between members of different social networks and ecological and social units.

Social Support

Social support is broadly defined as the emotional, psychological, physical, informational, instrumental, or material assistance that is provided to others to either maintain well-being or promote adaptations to different life events.

"Social support is generally considered to have a number of dimensions, including instrumental assistance, information provision, and emotional empathy and understanding" (Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983a, p. 209). More specifically, social networks serve the functions of providing assistance, advice, help, services, and guidance (Brim, 1974; Caplan, 1974; Tolsdorf, 1976; Walker, MacBride, & Vachon, 1977; Weiss, 1974). There is nearly unanimous agreement among social network theorists that social support networks function to nurture and sustain links among persons that are supportive of one another on a day-to-day basis and in times of need and crisis.

Mitchell and Trickett (1980) summarized the bulk of material on the functions of social support by stating that social networks provide "emotional support; task-oriented assistance; communication of expectations, evaluation, and a shared world view; and access to new and diverse information and social contacts. Although these categories are tentative, they suggest ways in which one might begin to assess the viability of one's network" (p. 30).

Well-Being and Stress

Well-being, stress, depression, strains, and mood changes are terms that are often used interchangeably to reflect responses to different life events. The terms well-being and stress are used here generically to characterize these responses. Well-being and stress are defined as physical and affective states manifested in response to actual or perceived life events.

The ways social support buffers the effects of stressful events and life crises have been well documented (Dean & Lin, 1977). Social support has been found to both enhance well-being and decrease stress as individuals deal with day-to-day life events and demands, including inter- and intra-personal crises (Janis, 1975), job loss (Gore, 1978), loss of a family member (Lindemann, 1944), the birth of a child (LeMasters, 1957; Litwak,
1960), and work-related problems (Cochran & Bronfenbrenner, 1978). For example, the birth of a first child has been found to be a crisis situation for some individuals (LeMasters, 1957), yet the simple reintegration of extended family members into the nuclear family unit has been found to buffer stress and enhance the well-being of the new parents (Litwak, 1960). The significance of social support was summarized by LaRocco, House, and French (1980) who stated that the "deleterious effects of psychosocial stress on health may be lessened or even eliminated in the presence of social support, while remaining strong for individuals having little or no support" (p. 202).

A series of studies of families of mentally retarded, physically impaired, and developmentally at-risk children conducted at the Child Development Laboratory at Western Carolina Center, Morganton, North Carolina, found that different aspects of support (satisfaction, network size, role sharing, etc.) have positive effects on the intrapersonal functioning of the parents. Parents with supportive social networks report enhanced well-being, less stress, and fewer demands on time as they care for their developmentally delayed child. These findings, replicated across five studies, provide convincing evidence that even the deleterious effects of the birth and rearing of a handicapped youngster can be lessened by using support to the family as a form of early intervention (Causby, 1984; Dunst, 1982; Dunst, McWilliam, Trivette, & Galant, in preparation; Dunst & Trivette, 1984; Dunst, Trivette, & Cross, in press-a, in press-b, in press-c; Trivette, 1982).

Life Experience. Life changes, recent life experiences, and life events are terms that are closely related to the concept of stress. Taken together, these terms refer to events that are likely to lead to disruptions in links among network members, and which have the probability of having negative impacts (Holmes & Rahe, 1967; McCubbin, Patterson, & Wilson, 1981a; Rahe, 1978; Rahe, McKEan, & Arthur, 1967). Scales that measure life changes include items that tap such things as changes in work status, disruptions in the family unit, death and divorce, marital discord, etc. In contrast to measures of well-being that assess primarily the proactive contributions of assistance, measures of life changes focus on the effects of less favorable and desirable events and occurrences. For purposes of classification, scales that measure life changes are considered to be a special subset of stress measures.

Coping

The terms coping, psychological adaptation, and personal adjustment are all used to characterize attempts to manage different life events and personal responses to them. Following McCubbin, McCubbin, Nevin, and Cauble (1979), coping is defined as the personal or collective (with other individuals, group, programs, etc.) efforts to manage the adverse effects associated with different life events.

There is now a considerable body of evidence to indicate that social support facilitates the ability to cope with day-to-day crises and different life events (Cohen & Sokolovsky, 1978; Froland, Brodsky, Olson, &
Stewart, 1979; Meyers, Lindenthal & Pepper, 1975). For example, Hirsch (1979b) found that persons with social networks that performed multiple roles and served different functions were able to cope and adapt to different crises by seeking out the most appropriate source of information and help to deal with different problems. This suggests that availability of multiple sources of assistance may be crucial in enhancing coping abilities. In fact, Leutz (1976) found that a program designed to increase awareness of different community services was successful in increasing the use of these services in response to different life crises.

Other Family-Level Outcomes

The role that social support plays in mediating other behavior characteristics of different family members has been demonstrated in a number of studies. Crnic et al. (1983a) found that support available to mothers of very young infants was significantly related to the mothers' general life satisfaction and satisfaction with parenting. Mothers with greater social support and less stress reported more pleasure in rearing their child, their parenting roles, and life in general.

Data collected at the Child Development Laboratory (Dunst, 1982; Dunst & Trivette, 1984; Dunst, Trivette, & Cross, in press-b, in press-c; Trivette, 1982) indicate, for example, that support available to families of young handicapped and mentally retarded children is related to family integration (cohesiveness) and perceptions parents have of the impact of their child's handicapping condition. Parents who rated their social support networks as being more helpful in terms of the care of their handicapped child reported that their families functioned better as integrated social units, and that their child's handicapping condition did not seem to have a negative impact on their families. In a study by Dunst and Trivette (in preparation), support available to parents was found to be significantly related to long-term expectations for their handicapped children. Parents who reported having larger degrees of support also reported that they expected their children to eventually achieve and attain higher levels of social and intellectual competence. Together, these studies demonstrate that social support can have an indirect impact on the attitudes of parents, the integrity of the family, and expectations parents have for their children.

Impact of Social Support in Other Areas

Perhaps one of the most intriguing hypotheses derived from ecological and social support theories is that the nature of social support available to families of young children mediates the styles of interaction parents use with their children. Evidence from several studies provides support for this contention (Causby, 1984; Crnic et al., 1983a; Crockenberg, 1981; Embry, 1980; Giovanonni & Billingsley, 1970; Hetherington, Cox, & Cox, 1976, 1978; Philliber & Graham, 1981; Weintraub & Wolf, 1983). Causby (1984) found that parents with limited social support available to them tended to control and direct their children's behavior during play. In contrast, parents with larger degrees of social support tended to use interaction techniques that allowed children more autonomy.
According to ecological theory, a child's development is influenced directly and indirectly by a host of factors emanating from ecological units (Cochran & Brassard, 1979; Bronfenbrenner, 1977, 1979). That is, social support is seen as a mediating variable in affecting child behavior and development. Crockenberg (1981) recently reported evidence to support this contention. She found that the type of attachment behavior manifested by infants was significantly related to the nature of the social support available to the children's mothers (see also Crnic et al., 1983a; Dunst, Trivette, & Cross, in press-a).

Together, the data concerning the moderating and mediating effects of social support on parents, family, and child functioning illustrate how support can affect different behavior outcomes and strongly suggest that support can be viewed as an intervention that can proactively influence intra- and interpersonal behavior.

**MEASUREMENT SCALE MATRIX**

The following table provides a list of measures of social support and measures of other parental and family behavior characteristics. The left-hand column of the table lists the various measurement instruments. The next two columns to the right list each scale's source and the reference (by number in the reference section) of the measurement scales and other relevant papers that describe the use of the scales for different purposes (research, clinical assessment, intervention, etc.). These secondary materials are by no means exhaustive.

The columns to the right indicate areas to which the scales pertain. (A checkmark appears in the appropriate box.) The first three of these columns cite types of social support: intrafamily support, kinship support, and extrafamily support. Intrafamily support includes support provided by nuclear family members (spouse, children) and relatives. Kinship support includes support provided by friends, neighbors, and other personal acquaintances. Extrafamily support is provided by social groups (church, social clubs, etc.), professionals (physicians, psychologists, teachers, etc.), and professional agencies (health departments, schools, hospitals, early intervention programs, etc.). The next two columns cite measures of well-being: physical well-being and emotional well-being. The next column notes whether or not the scales assess coping abilities, family integrity, parent attitudes (including life satisfaction and satisfaction with parenting), and the parents' expectations for their children. The last column indicates if each scale appears in Table 2, which cites validity and reliability data.

References for the measurement scales are provided in the reference section.
## Table 1

### Measures of Social Support and Family Behavior

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RELIABILITY AND VALIDITY OF THE SCALES

Definition

The extent to which measurement scales yield the same information across measurement occasions establishes the reliability of a scale. The extent to which measurement scales assess what they purport to measure and relate to other criterion measures establishes the validity of a scale. Different types of reliability (test-retest, alternate-forms, internal consistency, observer, etc.) and validity (content, criterion-related, construct, etc.) establish a scale's use for a particular purpose.

Dean and Lin (1977), in their review of the stress-buffering role of social support, noted that though considerable evidence indicates that support mediates well-being and coping, "the development of reliable and valid measures of social support remains a priority task... . A thorough search in the social and psychological inventories of scales has failed to uncover any measures of social support with either known and/or acceptable properties of reliability and validity" (pp. 408-409). Some advances have been made since Dean and Lin made this statement, but considerable work remains to fully establish the reliability and validity of social support scales.

Measures of stress and well-being fare much better with regard to reliability and validity (see especially Diener, 1984; Wilson, 1967), though the number of scales with established psychometric properties is small relative to the number available. A scale that has not been subjected to the rigors of reliability and validity testing must be considered inadequate or marginal for clinical or research use. (A detailed discussion of reliability and validity is beyond the scope of this monograph. For detailed accounts of the psychometric properties of tests, see American Psychological Association, 1974; Anastasi, 1982; Nunnally, 1967.)

Table 2 shows scales listed in Table 1 for which reliability and validity data could be discerned. The manuals or manuscripts which describe the scales were the primary sources of data; published and unpublished reports were secondary sources. No attempt was made to perform a comprehensive review of the literature to secure additional references, nor was data requested which is available from the authors of the scales. Therefore, the data in Table 2 must be considered incomplete, though the information is representative of the state-of-the-art with regard to established reliability and validity. Overall, 21 of the 99 scales in Table 1 have reliability data, and 22 scales have some type of validity data.

Reliability

Four types of reliability data were found for the scales: internal consistency, short-term test-retest reliability, long-term test-retest reliability, and alternate-forms reliability. Eighteen of the scales have undergone some type of analysis for internal consistency; most showed a moderate to substantial internal consistency. Ten scales have data indicat-
ing the extent to which test-retest correlations show adequate stability in behavior over short periods of time. For those scales, the $r_s$ range (.44 to .99) indicates moderate to substantial stability in behavior. Only two scales have data which indicate long-term stability, and only two scales have data which indicate alternate-forms reliability. Coefficients show moderate ($r = .47$) to substantial ($r = .84$) long-term stability and high $r_s = .91 - .96$ alternate-forms reliability. Overall, the data concerning reliability of the scales are quite adequate and acceptable.

**Validity**

Thirteen of the scales were factor analyzed to discern the number of dimensions of behavior the instruments measure. Multiple factor solutions were obtained for all analyses. Findings indicate that the various scales measure different aspects of the same behavior construct. Eighteen of the scales were assessed with regard to their relationship to some criterion measure. Correlational analyses between the predictor and criterion measures, or comparisons between groups differing along some dimension which the predictor variable is assumed to affect, were used to determine criterion validity. The $r_s$ for the correlational analyses indicate substantial variability among scales in terms of predicting criterion behavior. All of the comparisons between groups showed significant differences in the expected direction. The criterion validity data indicate that certain scales are better than others in terms of their ability to differentiate between persons differing in the behavior for which the scales are designed to discriminate. Consequently, care should be taken when selecting scales that are to be used as measures for determining the effects on the outcomes of interest.
Table 2

Reliability and Validity of the Scales

<table>
<thead>
<tr>
<th>Scales</th>
<th>References (see page 9)</th>
<th>Internal Consistency</th>
<th>Short-Term Test-Retest</th>
<th>Long-Term Test-Retest</th>
<th>Alternate Forms</th>
<th>Factor Structure (# of Dimensions)</th>
<th>Validity</th>
<th>Criterion</th>
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<tr>
<td>Adolescent-Family Inventory of Life Events and Changes</td>
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<td>$r_s = .67 - .89$</td>
<td>$r_s = .69 - .90$</td>
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<td>$r_s = .73$ and .76 with Psychological General Health Questionnaire (Wallston, Wallston, &amp; DeVellis, 1978)</td>
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<td>Affect Intensity Measure</td>
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<td>Diener (1984) reported moderate to high correlation with Mood Survey (Underwood &amp; Fomby, 1980)</td>
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<td>Affectometer</td>
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<td>$r_s = .73$ with Bradburn Affect Balance (Bradburn, 1969)</td>
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<td>3</td>
<td>$r_s = .90 - .96$ with Family Environment Scale (Moos, 1974)</td>
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<td>Daily Interaction Rating Form</td>
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<td>$r = .53$ with Social Systems Scale (Hirsch, 1979)</td>
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<td>$r = .72$ with Family Functioning Index (Fleiss &amp; Satterwhite, 1973)</td>
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<td>$r_s = .80 - .90$</td>
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$r_s$ denotes the correlation coefficient.
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<td>8, 67</td>
<td>rs = .62 - .99</td>
<td>rs = .54 - .94</td>
</tr>
<tr>
<td>Social Relationship Scale</td>
<td>127, 128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Relationships Index</td>
<td>93</td>
<td>r = .88</td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES

Below are complete citations for all the measurement scales and reports cited in the matrices and all research referred to in the narrative sections of this paper.


faction with Life Scale. Manuscript submitted for publication, 
University of Illinois, Champaign-Urbana.

41. Dunst, C. J. (1982, November). Social Support, Early Intervention, 
and Institutional Avoidance. Paper presented at the annual meeting of 
the Southeastern Association on Mental Deficiency, Louisville, 
Kentucky.

naire, Family, Infant and Preschool Program, Western Carolina Center, 
Morganton, North Carolina. (Adaptation of the Parental Expectation 
Scale—see Schaefer & Edgerton, 1977)

Scale: Reliability and Validity. Journal of Individual, Family, and 
Community Wellness, 1(4), 45-52.

44. Dunst, C. J., McWilliam, R. A., Trivette, C. M., & Galant, K. (in pre-
paration). Toward Experimental Evaluation of Family-Level Interven-
tions: Experiences from the Family, Infant, and Preschool Program. 
In H. Weiss & F. Jacobs (Eds.), Evaluating Family Progress.

port Approach to Early Intervention. Paper presented at the annual 
meeting of the Association for Behavior Analysis, Milwaukee.

46. Dunst, C. J., & Trivette, C. M. (1984, August). Differential Influ-
ences of Social Support on Mentally Retarded Children and Their 
Families. Paper presented at the annual meeting of the American 
Psychological Association, Toronto, Ontario, Canada.

47. Dunst, C. J., & Trivette, C. M. (in preparation). Social Support and 

Influences of Social Support: Personal, Family, and Child Outcomes. 
American Journal of Mental Deficiency.

49. Dunst, C. J., Trivette, C., & Cross, A. (in press-b). Roles and Sup-
port Networks of Mothers of Handicapped Children. In R. Fewell & P. 
Vadasz (Eds.), Families of Handicapped Children: Needs and Supports 
Across the Life Span. Austin, Texas: PRO-ED.

50. Dunst, C. J., Trivette, C. M. & Cross, A. (in press-c). Social Sup-
port Networks of Appalachian and Non-Appalachian Families. In S. 
Keefe (Ed.), Mental Health in Appalachia. Lexington, Kentucky: 
University of Kentucky Press.

lished rating scale, Western Carolina Center, Morganton, North 
Carolina.


91. Holahan, C. J., & Moos, R. H. (1980). *Traditional Social Support Index*. Unpublished scale, Social Ecology Laboratory, Stanford University, School of Medicine, Stanford, California.


95. Holmes, T., & Rahe, R. (1981). Schedule of Recent Experiences. Unpublished paper, School of Medicine, Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle. (Available from R. Rahe, Department of the Navy, Naval Health Research Center, P.O. Box 85122, San Diego 92138)


156. Pattison, E. M. (1975). *Psychosocial Kinship Inventory*. Unpublished instrument, School of Medicine, Department of Psychiatry, Medical College of Georgia, Augusta.


166. Rahe, R. (1975). *Recent Life Changes Questionnaire*. Unpublished instrument, Department of the Navy, Naval Health Research Center (P.O. Box 85122), San Diego, California.


