#### DOCUMENT RESUME

ED 303 705

CG 021 402

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TITLE

Social Support Providers: A Multidimensional Analysis

of Network Systems.

PUB DATE

Aug 88

NOTE

lip.; Paper presented at the Annual Meeting of the

American Psychological Association (96th, Atlanta,

GA, August 12-16, 1988).

PUB TYPE

Reports - Research/Technical (143) --

Speeches/Conference Papers (150)

EDRS PRICE

MF01/PC01 Plus Postage.

DESCRIPTORS

College Students; \*Helping Relationship; Higher

Education; \*Individual Characteristics;

\*Interpersonal Relationship; Personality Traits;

\*Social Networks; \*Social Support Groups

### **ABSTRACT**

The social support literature lacks empirical studies addressing structural distinctions between social network ties. It often divides social support into functional categories such as material, emotional, or advice support, with little regard to specific support providers or how the support from these providers can be delineated by individuals receiving support. In this study, 125 undergraduate students used a 7-point Likert-type scale to rate how similar support providers were to each other in how they were supportive. The data were analyzed using multidimensional scaling analysis. Subjects also rated each support provider on 17 adjectives (e.g. warm, accessible, equal), and these ratings were regressed over the two principal dimensions and helped define them as "intimacy" and "equality/relevance to daily life." The "intimacy" dimension primarily separated informal providers such as family and friends from providers whose interactions are more likely to be structured and organized, such as school and work personnel. The second dimension seemed to separate providers more or less likely to be involved in daily interactions with the participant, whether or not these interactions were intimate. Friends, bosses, schoolmates, and faculty were high on this dimension, while kin and doctor/dentist were low. Cluster analysis of the similarities ratings and factor analysis of the adjective ratings corroborated these results. (Author/NB)

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# Social Support Providers:

A Multidimensional Analysis of Network Systems

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#### ABSTRACT

One prominent ga in the social support/social network literature is the lack of empirical studies addressing structural distinctions between social network ties. The bulk of the literature divides social support into functional categories such as material, emotional, or advice support, with little regard to specific support providers, or how the support from these providers can be delineated by individuals receiving the support. Yet, these structural distinctions may be more essential and robust than those between various functions. In this study, subjects rated how similar support providers are to eachother in the ways in which they are supportive using a 7-point Likert-type scale. The data were analyzed using multi dimensional scaling analysis. Subjects also rated each support provider on seventeen adjectives, (e.g. warm, accessible, equal), and these ratings were regressed over the two principal dimensions and helped define them as: "intimacy" and "equality/relevance to daily life". Cluster analysis of the similarities ratings and factor analysis of the adjective ratings cor roborated these results. The results are discussed in terms of their importance for future research, clinical intervention, and preventive efforts based on different type of support providers (i.e. psychotherapy versus mutual help groups).



# Social Support Providers: A Multidimensional Analysis of Network Systems

One of the most commonly endorsed typologies for categorizing perceived social support is that of Cohen and Wills (1985). They divide support into 4 types: material, emotional, advice, and social companionship. Although other researchers have presented different typologies of perceived support (e.g., Fiore, Becker, & Coppel, 1983; House, 1981), like Cohen and Wills they have been primarily targetted at identifying the various functions that might be served by social ties. However, there is some evidence that many, and perhaps most, social support instruments tap the same social support construct.

A recent comprehensive study which compared seven of the most frequently used social support/network scales in terms of their interrelationships and correlates (B. Sarason, Shearin, Pierce, & I. Sarason, 1987) found that these diverse sources all seemed to measure "the extent to which an individual is accepted, loved and involved in relationships with open communication" (i.e., emotional support) (p. 813). This finding is very similar to that of Sternberg and Grajeck (1984) and the work of Berndt and Perry (1986). Although the evidence for a single, overriding function of social support is compelling, we believe that it should not shut out research on other social support distinctions.

This paper examines specifically the distinctions between support providers which may form separable and identifiable support systems. The idea that individuals possess multiple support systems figured prominently in the work of Gerald Caplan (1974). According to Caplan, these systems which are differentiated on the basis of provider characteristics. Caplan maintained that these systems could be defined along a "formal-informal" dimension. Formal support systems, he believed, were "organized in a planned way by someone who is interested in promoting the health of the individual or population" (p. 7). Formal providers include doctors, teachers, clergy, and counselors. Informal systems, by comparison, are less structured and intentional. Support providers in these systems include friends and family members.

In addition to the formal-informal distinction, two studies have found that peer support can be meaningfully distinguished from other informal support, such as family support (Cauce, Felner & Primavera, 1982; Cauce, Hannan & Sargeant, 1987a). These studies and others (Hartup, 1979) suggest that support from one type of provider may be more important that support from another type depending on the person's developmental stage and current needs. Further, a recent study by Wolchik, Beals, and Sandler (in press) supports the idea that provider distinctions account for a greater portion of the variance than distinctions between support functions.



In sum, the distinctions between support providers, rather than support functions, appears robust and meaningful. The purpose of the present research is to explore further distinctions between providers and map out the morphology of support systems. We hypothesize finding formal, peer, and family support systems clearly distinguishable by similarities in the ways in which subjects perceive support from various providers. Rather than using support constructs developed from prior theories of support, a description of the system differences will be generated using the subject's own ratings of system member's similarities in support provision and personal qualities.

#### **METHOD**

## **Participants**

Participants were 125 students from introductory psychology courses who volunteered for the study and were given course credit. Approximately 65% of the participants were female and 35% were male which is representative of the sex ratio generally found in introductory psychology courses. College students were chosen to participate because of the sophisticated and tedious nature of the tasks involved.

### Instruments

Similarities in Support Rating Participants completed a rating scale including twelve potential support providers (i.e, boss, faculty, parents, schoolmates, advisor, friends away and local, siblings, boy/girlfriend, doctor/dentist, cousins, and aunt/uncle). Based upon extensive pilot testing, providers were chosen to be relevant for this specific smample (college undergraduates) and to encompass both formal and informal providers. Providers are paired in all combinations on this form. Participants are asked to rate, using a seven-point scale, how similar these providers of social support are to each other in the ways in which they are supportive.

Social Support Adjective Ratings Participants also completed a scale containing the same 12 support providers each followed by 15 likert-style adjective ratings. The adjectives were chosen, based on pilot testing, to represent some of the suggested differences between types of support providers. They included flexible, loving, warm, intimate, formal, sharing, "here and now", present, accessible, relevant, dependable, egalitarian, comforting, accepting and aloof.

## **RESULTS**

We subjected the Similarities in Support mean ratings to Euclidean Multi-dimensional Scaling (MDS; Young & Lewycky, 1980). A two-dimensional space seemed most appropriate based on Kruskal's stress formula, stability of the sclution, and interpretability (see Figure 1).



# Insert Figure 1 about here

Mean adjective ratings were then regressed onto the MDS solution in order to aid the interpretation of dimensionality. Seven of the fifteen adjective ratings scales had multiple correlations over .80 and weights greater than .80 on one dimension. The adjecties warm, intimate, loving, and formal (reversed) served as good descriptors of the first dimension shown in Figure 1 which is labeled "Intimacy". Boy/girlfriend, parents, siblings, and local friends are high on this dimension, while boss, faculty, and doctor/dentist are low. The second dimension is most highly related to the adjectives relevant, accessible, and "here and now", providing support for the label "Relevance to Daily Life". Support providers high on this dimension (friends, school and work personnel) are more likely to have nearly daily contact with participants. Schoolmates and other friends are found at the high end of this dimension and doctor/dentist and aunt/uncle are at the low end.

Hierarchical cluster analysis (Johnson, 1967) was also performed on the similarity ratings. Cluster analysis focuses on small distances or "neighborhoods" embedded within the global dimensions established by the MDS. A cluster map is presented in Figure 2.

## Insert Figure 2 about here

This analysis first revealed two general and distinct clusters: one including parents, siblings, friends local and away, schoolmates, boy/girlfriend, aunt/uncle, and cousins, the other included doctor/dentist, faculty, advisor, and boss; essentially separating "informal" from "formal" support systems. Additional separate and interpretable clusters emerged for "kin," "friends," and "nuclear family" support systems.

Results from this analysis are superimposed upon Figure 1 using loops to delineate each cluster. The solid loops around stimuli indicate strong proximities; dotted loops indicate moderate proximities. The "friends" cluster appears to be high on "intimacy", but clearly separate from the "nuclear family" cluster which is also high on intimacy. The difference between the clusters can be explained by friends being more immediate or relevant in student's daily life. The "formal" cluster was moderately high on daily relevancy but low on intimacy, opposite of the "nuclear family" and "kin" clusters. This analysis indicates that there is a good correspondence between the MDS dimensions of providers and the cluster analysis neighborhoods.



### DISCUSSION

The results from this study show that providers of social support can be clearly separated into distinct support sytems. The importance of delineating these systems can be seen in social support methodology and theory, as well as in interventions that utilize support concepts.

Methodologically, research in social support has become mired in competing theories. Part of the problem in untangling the social support web is the lack of measurement tools having empirical validation. Studies utilizing multi-dimensional scaling can help clarify critical aspects of social support by allowing the targets of the measures we use determine which constructs are important and how these constructs can be described. This is a way to "bootstrap" validity. Ultimately, studies such as this will facilitate social support scale This study supports the inclusion of ratings of development. similarities and differences between support providers and support systems into social support measures. Scales by Zimet et al (1988) and Procidiano and Heller, (1983), among others, begin to tap differences between providers, but more work is needed in this area.

In terms of theory, the support systems that emerged from this study generally correspond to Caplan's (1974) formal-informal dimensions, however the informal system can be further differentiated into friend, family, and kin systems. This study, using college-age subjects, supports the research with children and adolescents that finds similar distinctions between support providers (Bogat et al, 1985; Cauce et al, 1982; 1987).

It appears from our results that individuals organize the potential sources of support in their networks according to their level of emotional closeness (intimacy) and their involvement in the ongoing events of their daily life (relevance). As Caplan suggested, the intimacy dimension primarily separates informal providers such as family, kin, and friends from providers whose interactions are more likely to be structured and organized, such as school and work personnel. The second dimension seemes to separate providers more or less likely to be involved in daily interactions with the participant, whether or not these interactions are intimate. Friends, boy/girlfriend, boss, schoolmates, and faculty were high on this dimension, while kin and doctor/dentist were low.

If persons use similar criteria in making decisions about whom to approach for support as they do in judging support availability, one can speculate that they would turn to formal, family, and friend providers for different kinds of concerns. It could be hypothesized that people would look to family and friends for emotional support, and to more formal providers for school or work-related support. Also friends may be sought more for minor and frequent problems, and family for more major, but infrequent decisions and problems.



This suggests that support providers who are both intimate and relevant to daily life play a special role. Their important position in social networks may explain the appeal and effectiveness of mutual support groups consisting of ersons dealing with similar problems (e.g. Alchoholics or Overeaters Anonymous, Hospice groups, support groups, etc.). Such groups are very similar to the naturally-occurring friend support system. Also a number of studies have shown that support from friends may be particularly important for children and adolescents (Furman & Buhrmester, 1985; Cauce, 1986; Hartup, 1979).

Utilizing these peer support systems and mutual help groups could be useful for implementing a variety of intervention programs such as helping "at-risk" children, or adults in transition from institutions to the community. Once the distinctive ple and value of different support systems has been more clearly established, program development can move forward in a more sytematic way. The evidence presented here suggests that family, friend, and peer support groups can be reliably distinguished. The next, and more important step, is to explore the systems' relative importance to mental health, and to apply that knowledge to intervention and prevention planning.



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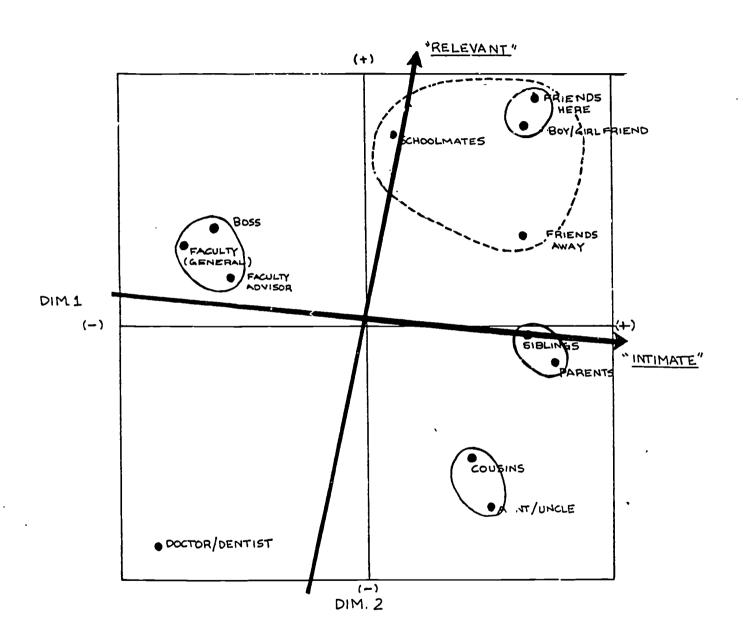
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# MDS CONFIGURATION



NOTE: ARROWS REPRESENT PROPERTY VECTORS FOR THE ADJECTIVES "INTIMATE"
AND "RELEVANT." SOLID LOOPS DELINEATE CLOSE PROXIMITIES, DOTTED LOOPS
MODERATE PROXIMITIES, AS ESTABLISHED BY CLUSTER ANALYSIS.



# Social Support Providers

Figure Two

# Horizontal Cluster Plot

		ר
Doctor Dentist	xxxxxxxxxxx	
	ХX	,
	ХX	İ
Faculty	xxxxxxxxxxx	
	xxxxxxxxx	
	xxxxxxxxx	FORMAL.
Faculty Advisor	xxxxxxxxxxx	SUPPORT SYSTEM
	xxxxxxx	
	xxxxxxx	
Boss	xxxxxxxxxxx	
	X	J
	X	٦ .
Aunt/Uncle -	X X X X X X X X X X X	1
	xxxxxxx	KIN
	<b>x x x x x x x</b>	SUPPORT SYSTEM
Cousins	x x x x x x x x x x x	
	xxxx	-
	XXXX	٦
Parents	XXXXXXXXXX	
	xxxxxxxxx .	NUCLEAR FAMILY
	x x x x x x x x x	SUPPORT SYSTEM
Siblings	xxxxxxxxxx	
	XXXX	1
	XXXX	٦
Friends Away	xxxxxxxxxxx	
	XXXXXXX	
	<b>***</b>	}
Schoolmates	xxxxxxxxxxx	
	XXXXXXX	FRIEND
	x x x x x x x x	SUPPORT SYSTEM
Boy/Girlfriend	xxxxxxxxxxx	,
	x x x x x x x x x	
	x x x x x x x x x x	
Friends Here	****	
		•

