THE EFFECTS OF SELF-HELP ON HEALTH STATUS AND HEALTH-SERVICES UTILIZATION

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ABSTRACT

The present study was designed to assess whether the health-protective effects of membership in supportive primary networks, such as reduced illness and distress, extend to membership in self-help groups.

In Study 1, the self-help sample was compared to acute and chronically ill controls on measures of health status and attitudes toward health-services utilization. Study 2 was an examination of how self-help group processes related to a variety of outcomes in a sample of chronically ill or disabled self-help group members.

Self-help group members demonstrated levels of distress about health problems equal to the acute controls and were less distressed than the chronically ill controls who were not involved in mutual-aid organizations. Self-helpers also felt themselves more likely to take action in the face of concerns about health issues than acute controls. Finally, supportive group processes were associated with perceptions of positive outcome among self-help group members.

The influence of social support on health behaviour has been discussed in many reviews of the empirical literature within the last 15 years. Although many issues remain to be resolved, one conclusion on which a general consensus has been reached is that the health and mental-health status of those who are included within a social network that can be used as an adjustive resource is enhanced in comparison to those who are not (Barrera, 1986; Blythe, 1983; Broadhead et al., 1983; Cohen & Wills, 1985; Leavy, 1983; Turner, 1983). Furthermore, it has often been claimed that the influence of social networks is apparent in the utilization patterns of consumers of health services (Berkanovic, Telesky, & Reeder, 1981; Gottlieb, 1976; McKinlay, 1972).

While these conclusions are undoubtedly important, they largely refer to the effects of social support that are achieved within the context of such naturally occurring primary networks as family and friends rather than through such intentionally organized secondary networks as self-help groups. What are the reasons behind this differential emphasis? One possibility is that those who have reviewed

the literature on the health benefits of social support are not as interested in self-help groups as they are in primary networks. This might explain why little space has usually been devoted in reviews on social support to studies that have found that self-help leads to enhanced adjustment for widows (Vachon, Lyall, Rogers, Freedman-Letofsky, & Freeman, 1980), cancer patients (Spiegel, Bloom, & Yalom, 1981), former mental-health patients (Raiff, 1984), unwed mothers (Gottlieb, 1985), and those who are overweight (Katz, 1981). Another possibility, which we believe is critically important, is that the empirical research base upon which reviewers may draw remains undeveloped. Previous outcome studies of self-help, according to this explanation, have concentrated on evaluating the impact of single groups and have not assessed such variables as health status and health utilization. This rather narrow emphasis has, in turn, minimized the health relevance of these studies and limited the extent to which conclusions may be generalized across groups.

Overall, then, little research has been done on the impact of self-help groups on health behaviours and attitudes. This state of affairs holds some important policy implications in that it will be difficult to elaborate programs for using self-help for the purpose of health promotion, as some administrators have suggested (e.g., Epp, 1987; Koop, 1987), in the absence of findings that point to the significance of self-help for this concept. Scientifically, the low level of effort on this topic is also unfortunate in several respects. For one thing, it leaves open the possibility that some of the most meaningful conclusions about the effects of social support may not be generalizable beyond a certain range of operational definitions. For another, it represents a missed opportunity to study the effects on health behaviour of a form of support that is unique in that (a) it usually addresses itself to specific problems and (b) it provides a potentially powerful perspective, based on the authority of personal experience. For still another, it constitutes an impediment to future research, since it is unlikely that the processes by which personal change is achieved in self-help groups will be studied until the effects of being a group member are outlined.

These conclusions underscore the value of assessing the impact of self-help membership on such variables as health utilization and status. The following sections of this article report a two-part study on this topic. The first part compared the responses of chronically ill members of self-help groups to a health questionnaire with the responses of a similar group that was matched for chronicity of illness, age, and sex. A second equivalent control group of patients facing such acute but essentially "normal" health complications as bronchitis, sprains, and flu was also selected. Reasoning that self-help is a powerful operationalization of social support that promotes a sense of well-being in its members and provides them with a resource other than the formal health system to rely on for the resolution of health concerns, we hypothesized that self-helpers would report low levels of distress about health problems and utilization attitudes that were (a) not only different from the group of chronically ill patients who were not self-helpers but (b) similar to the group of acutely ill patients. In addition to the health questionnaires, self-help members also completed a questionnaire about the helping exchanges that occurred in their groups. This second part of the study, exploratory in nature, examined the relationships between helping processes and outcome variables identified earlier via group comparisons.

STUDY 1

Method

Subjects. Data for 50 self-help members were obtained from another project in which they completed a set of health-behaviour and helping-process questionnaires, described below, before participating in a series of self-help fairs organized by the Self-Help Development Unit of the University of Saskatchewan (Wollert & Miller, 1985). The Unit was established for the purpose of promoting and conducting research in self-help. The fairs were organized to provide an opportunity for members of self-help groups to meet to share information about self-help with each other and with the public.

Organizational units were selected for the original study on the criteria that they could be characterized as self-help groups according to the widely-accepted definitions of Levy (1976) and Katz and Bender (1976) and that their focal concerns suggested their members frequently used the health-care system. Forty-two percent of the responses ($N = 21$) were received from members of groups whose focus was psychiatric disorders (Agoraphobics Regina, Crocus Co-op, Emotions Anonymous, Portage Self-Help group). Fifty-eight percent ($N = 29$) were received from groups concerned with chronic physical disease or disability (Arthritis Fellowship, Huntington's Society, Lupus Erythematosus Society, Multiple Sclerosis Society).

Fifty chronic patients who were not group members but who faced similar health concerns to the self-helpers were recruited through agencies that provided them with medical and psychiatric care. Another fifty patients who presented themselves for treatment of acute illnesses and injuries or time-limited counselling were recruited from the outpatient clinics of several medical centres in Saskatoon and a community mental-health clinic.

Questionnaires. Subjects who agreed to participate in the self-help study were provided with three different questionnaires. These were the Health Service Utilization Questionnaire, the Health Status Questionnaire, and the Helping Process Questionnaire (HPQ).

Since our literature search and the reviews of others (e.g., Berkanovic et al., 1981; Mechanic, Cleary, & Greenley, 1982; Sharp, Ross, & Cockerham, 1983) indicated that health utilization and health status are multifaceted concepts and that no one instrument constitutes a superior approach to measuring either, we compiled our own questionnaires from items that were commonly used in other studies. Our Health Services Utilization Questionnaire for example, included an 11-item symptom list previously used to measure readiness to seek medical attention (Aday, Andersen, & Fleming, 1980; Andersen, Kravitz, & Andersen, 1975; Sharp et al., 1983), another item used to assess tendency to delay such action (Berkanovic et al., 1981; Marcus, 1981), and three items in which subjects registered the extent to which they used medical services for either checkups or treatment for acute and chronic conditions (Marcus, 1981). The first 12 items of the Health Status Questionnaire measured health worry and rejection of the sick role, dimensions of health perception included in an instrument prepared by Ware (1976). The last four items assessed various aspects of mood such as depression, anxiety, self-efficacy, and life satisfaction as these were related to health concerns.

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The Helping Process Questionnaire has been previously employed to assess self-help group processes (e.g., Wollert, Levy, & Knight, 1982; Wollert, 1986).

Procedure. As many self-help groups as could be located in the Province of Saskatchewan were contacted by Self-Help Development Unit staff and invited to participate in a self-help fair. Volunteers from these groups were solicited to be part of a study being conducted by the unit. Individuals who consented to participate in the Self-Help Development Unit study were presented with the package of questionnaires in March, 1985, and returned them by mail.

Survey materials for the control groups were distributed through a local hospital, two Home Care agencies, two provincial mental-health facilities, and several medical clinics. Questionnaires were completed by volunteers and returned by stamped, self-addressed envelope.

Acute and chronic patient controls were asked to complete the Health Service Utilization Questionnaire and the Health Status Questionnaire as well as supply basic demographic information such as sex, age, education, race, income, and marital status. Respondents were also asked to specify any chronic illnesses they may have had. Information concerning the nature of acute complaints was not requested. Questionnaires were presented to respondents under cover of an explanatory letter. Identifying information such as name, address, etc. was not requested. Control subjects were matched with self-help subjects in terms of age, sex, race, marital status, education, and income. For example, if a subject from the self-help sample was 40 years old, female, had a grade 12 education, was married, white, and had an income of $20,000, every attempt was made to find subjects from among the acute- and chronic-patient groups to match her in as many respects as possible. In addition, the ratio of medical to psychiatric/counselling patients in each control group was identical to that of the self-help sample.

Table 1 presents the distribution of diagnoses for the self-help and chronic control samples. As it was not possible to perfectly match self-help and chronic

TABLE 1

Distribution of Diagnoses for Self-Help and Chronic Control Samples

Self-Help Disease Type	N	Chronic Controls Disease Type	N
Arthritis	9	Arthritis	13
Huntington's Disease	1	Diabetes	1
Lupus Erythematosus	11	Epilepsy	1
Multiple Sclerosis	8	Hypoglycemia	1
Psychiatric Disorders	21	Interstitial Cystitis	1
		Multiple Sclerosis	2
		Osteoporosis	1
		Non-specified Chronic Illness	7
		Psychiatric Disorders	21
Total = 50		Total = 50	

patients in terms of their diagnoses, the presence rather than the type of illness was taken as the relevant factor determining their participation in this study.

Data Analysis. Between-group differences on the demographic variables were initially examined employing an omnibus multivariate analysis of variance. Although the overall test was significant according to Wilks' criterion $[F(12,284) = 3.288, p < .001]$, group differences emerged only on the income variable $[F(2,147 = 15.353, p < .001]$. However, as income does not determine access to health care in Saskatchewan due to public health insurance, these differences were not considered to affect conclusions which flowed from subsequent analyses. Health Status Questionnaire and the Health Service Utilization Questionnaire items from all three groups were then pooled and factor analyzed using SPSSX Factor program (SPSSX Inc., 1983). The factor analysis specified principle components extraction and orthogonal rotation. Only factors with Eigenvalues greater than 2.0 were retained for interpretation. Items with factor loadings greater than 4.0 were used to define the factors. Finally, scores were computed on the basis of the resulting factors according to the regression method. Between-group differences were assessed employing these factor scores as dependent variables.

TABLE 2

Factor Descriptions:
Health Service Utilization Questionnaire, and Health Status Questionnaire
Self-Help Sample, Acute and Chronic Controls

| Item #	Factor Loading	Process Name	Item #	Factor Loading	Process Name
Factor 1: Constructive Health Action			**Factor 2: Health Distress**		
41	.887	Heart	62	.745	Depression
37	.872	Diarrhea	64	.736	Anxiety
44	.860	Abdominal	63	.586	Capable
40	.847	Weight Loss	49	.523	Chronic
42	.842	Vomiting	48	.428	Acute
45	.820	Fever	55	−.410	Accepts Illness
38	.811	Breath			
36	.811	Weakness			
39	.805	Indigestion			
35	.731	Cough			
43	.693	Joints			
Factor 3: Self-Reliance					
52	.734	Avoid Doctor			
50	.624	Interference			
56	.548	Discussion			
60	−.492	Doctor			
57	.471	Others Worry			
54	.464	Keeps Going			

Results

Three factors, accounting for 44.2% of the total variance, emerged from the analysis: Constructive Health Action, Health Distress, and Self-Reliance. These reflected willingness to act upon potential health problems, degree of anxiety about health problems, and tendency to rely upon personal resources to cope with illness, respectively. The items which constituted these factors along with their loadings are presented in Table 2.

TABLE 3

One-Way Analysis of Variance for Constructive Health Action, Health Distress, and Self-Reliance by Group

Variable	df	MS	F	p less than
Constructive Health Action			4.339	.015
Between Groups	2	4.153		
Within Groups	147	.975		
Health Distress			12.039	.000
Between Groups	2	10.485		
Within Groups	147	.871		
Self-Reliance			.093	.911
Between Groups	2	.094		
Within Groups	147	1.012		

FIGURE 1

Factor Scores by Groups

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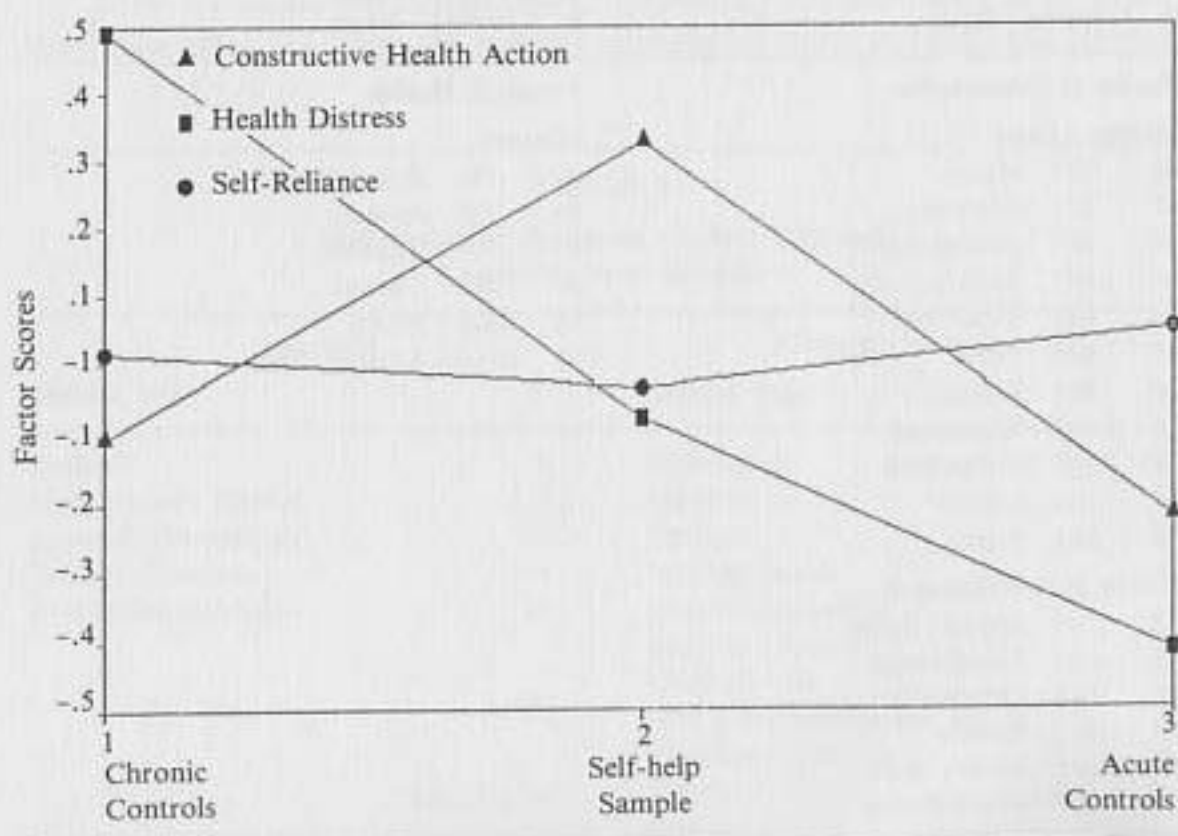
A multivariate analysis of variance test of the variables derived was significant according to Wilk's criterion [$F(6,272) = 5.375$, $p < .001$]. In order to further clarify the results of this analysis, three additional ANOVAs were performed using scores derived from the above factors as dependent variables.

No differences were found between the three groups on Self-Reliance ($F < 1.0$). However, the effect of the Constructive Health Action variable was significant [$F(2,147) = 4.339$, $p < .05$] as was the effect of the Health Distress variable [$F(2,147) = 12.039$, $p < .001$]. Table 3 presents the results of these tests. Group means on each of the variables are graphed in Figure 1.

Table 4 contains the results of *a priori* contrasts which were conducted in order to determine where specific group differences lay. Setting Alpha at .017 to control for the family-wise error rate, the self-help sample was found to be as likely to take action in the face of health problems as members of the chronic control group [$t(147) = 2.214$, $p < .028$] (although the comparison approached significance), but more likely than members of the acute control group [$t(147) = 2.790$, $p < .006$]. Control-group differences were not significant [$t(147) = .576$, $p < .05$]. It was also found that acute controls and self-help group members were much less distressed than the chronic controls [$t(147) = 4.885$, $p < .001$; and $t(147) = 3.047$, $p < .003$, respectively].

Overall, it appeared that the effect of self-help was to increase the readiness of this sample of chronic patients who were members of mutual-aid groups to act on their health concerns, while reducing their anxiety over their health status. We found that they were more like their "acute" counterparts on measures of distress than the sample of chronically ill patients who were not self-helpers.

TABLE 4

Summary of Between-Groups Contrasts by Constructive Health Action, Health Distress, and Self-Reliance

Contrast	df	t	t Probability (two-tailed)
Constructive Health Action			
Self-help vs. Chronic Controls	147	2.214	.028
Acute vs. Chronic Controls	147	.576	.565
Self-help vs. Acute Controls	147	2.790	.006
Health Distress			
Self-help vs. Chronic Controls	147	−3.047	.003
Acute vs. Chronic Controls	147	4.855	.000
Self-help vs. Acute Controls	147	1.808	.073
Self-Reliance			
Self-help vs. Chronic Controls	147	−.085	.932
Acute vs. Chronic Controls	147	−.323	.747
Self-help vs. Acute Controls	147	−.409	.683

STUDY 2

Method

Subjects. The subjects employed in Study 2 were the self-help sample described in Study 1.

Questionnaires. The Health Status, Health Services Utilization, and Helping Process Questionnaires described above were administered to this group.

Procedure. The procedure with regard to the administration of question-naires has been described in Study 1.

Data Analysis. In order to reduce the great number of individual scale items to a few conceptually similar categories, data analysis began with a principle-components factor analysis of HPQ items (including a separate analysis of the outcome items) in order to determine those processes which were central to self-help group functioning. Health Service Utilization Questionnaire and Health Status Questionnaire scales were analyzed in similar fashion. The details of these factor analyses were as in Study 1. The resulting factor scores were employed in regression analyses using variables derived from HPQ outcome items, Health Status and Health Service Utilization Questionnaire scores respectively, as criterion variables. Factor scores based upon HPQ process items served as predictors.

Results

The factor analysis of the Study 2 data produced two predictor and five criterion variables which represented self-help group processes and outcomes respectively. The predictor factors, accounting for 48.2% of the total variance, were Support and Confrontation. These represented relatively simple, positively toned, non-threatening processes and more complicated, negatively toned, and anxiety-producing processes respectively. The outcome factors, accounting for 54.6% of the variance, were Constructive Health Action which reflected willingness to act upon potential health problems, Perceived Helpfulness of Group, which provided an indication of how helpful the group was thought to be, and Self-Reliance which tapped the individual's tendency to rely upon his or her own resources to cope with illness. Health Distress, which reflected the degree of anxiety about health problems, and Low Concern About Own Health which indicated a lack of concern about health issues were also included. Item descriptors and loadings for each of these factors are presented in Table 5.

The Support factor was positively associated with Perceived Helpfulness of Group ($r = .54$, $p < .001$) and negatively correlated with Self-Reliance ($r = -.37$, $p < .008$). Support was not significantly associated with Constructive Health Action (although the correlation approached statistical significance [$r = .24$, $p < .08$]), Health Distress or Low Concern About Own Health. The Confrontation factor was negatively associated with Constructive Health Action ($r = -.36$, $p < .009$), but did not predict Perceived Helpfulness of Group, Self-Reliance, Health Distress, or Low Concern About Own Health. In all cases, the correlation between predictors was zero.

GENERAL DISCUSSION

The research reported here represented an attempt to examine the relationship between self-help and a number of health-related issues for members of a variety of stress-coping and support groups. Study 1 presented a comparison of how self-help group members differed from chronically ill and "acute" controls on measures of health status and attitudes toward health-services utilization. Study 2 related self-help group processes to a variety of outcomes.

Study 1 revealed that self-help group members showed levels of depression and anxiety similar to their "acute" counterparts, suggesting that self-help may have protected these individuals from the full emotional effects of having to cope with chronic ill health. If self-help can be construed as an effective source of social support, the current results parallel earlier reviews documenting the protective effects of primary network membership (e.g., Broadhead et al., 1983; Cohen & Wills, 1985; Leavy, 1983; Wethington & Kessler, 1986) as well as mutual aid (e.g., Raiff, 1982, 1984; Roskin, 1982; Spiegel et al., 1981; Videka, 1979).

Although the effects of mutual aid may have normalized the standing of the self-help sample with respect to the Health Distress variable, self-help group members held attitudes which suggested they were most likely, along with the chronic controls, to consult medical practitioners. This was contrary to expectation in that earlier reports by Raiff (1982, 1984) and Tessler, Mechanic, and Diamond (1976) indicated reduced medical-services utilization among less distressed individuals. We assumed that our sample of self-help group members would tend to rely upon each other for support rather than upon health-care providers and would consequently display attitudes suggestive of less frequent medical-service use.

It is likely that although both the self-help and chronic-patient samples were sensitized to health issues by their illnesses, the relative willingness of self-helpers to consult their doctors may have been due to the educational component of group activities. They may have felt they had more information and a better basis for making decisions about their health than non-members. Furthermore, the emotionally supportive aspects of group membership may also have helped them overcome their own denial of health concerns. Informal discussions with study participants suggested they felt their groups enhanced their ability to make informed and relatively sophisticated decisions about their own health care. In general, they thought they could collaborate more effectively with their physicians and be more critical health-service consumers.

Study 2 was revealing in terms of detailing relationships between self-help processes and outcomes among self-help group members. Socially supportive group processes were strongly associated with the perception of positive outcome but not with health distress or attitudes about health-services utilization. Although the relationship was not statistically significant, there was some indication that supportive processes predicted the willingness of the subjects to take constructive action in the face of health concerns. The more threatening processes which corresponded with the Confrontation factor were not positively associated with the perception of positive outcome or health status and were negatively correlated with the subjects' willingness to act upon potential health problems. These

findings were consistent with Wollert et al. (1982) and Wollert (1986) in that groups emphasized supportive, simple, and non-threatening processes. That these processes did not vary significantly with the Health Distress and Constructive Health Action variables was likely an artifact of the small sample size employed here (see Comrey, 1973). Presumably, the relationship between support and perception of positive outcome was robust enough to emerge in spite of this procedural shortcoming.

The present work strongly suggested that the social support available through self-help was able to reduce the psychological distress which has been shown to be a major component in determining medical services utilization (see Tessler et al., 1976). Although self-helpers were less distressed about health issues than their chronic controls, there is some reason to believe they were better in-

TABLE 5

Factor Descriptions: HPQ Process Items, HPQ Outcome Items, Health Status and Health Services Utilization Questionnaires, HPQ Process Items

Item #	Factor Loading	Process Name	Item #	Factor Loading	Process Name
Factor 1: Support			**Factor 2: Confrontation**		
12	.869	Empathizing	14	.857	Requesting Feedback
7	.855	Normalization	19	.839	Behavioural Rehearsal
16	.731	Mutual Affirmation	11	.801	Punishment
10	.694	Explanation	5	.753	Normative Reference
27	.687	Encouraging Catharsis	17	.748	Confrontation
24	.672	Justification	23	.746	Behavioural Proscription
20	.667	Checking In	25	.641	Reflection
21	.642	Instilling Confidence	8	.476	Modelling
3	.572	Instilling Hope	26	.461	Extinction
1	.567	Behavioural Prescription	4	.449	Offering Feedback
18	.566	Functional Analysis	13	.431	Discrimination
9	.564	Personal Goal Setting	27	.419	Encouraging Catharsis
22	.559	Encouragement of Sharing			
2	.520	Consensual Validation			
13	.516	Discrimination			
8	.460	Modelling			
25	.451	Reflection			
6	.435	Self-disclosure			

formed health-service consumers. As such, they may have much to offer medical practitioners in terms of suggesting ways for coping with disability and illness. In many cases, the group was seen as a superior source of information about coping strategies and treatment options.

The results of the current study also suggest self-help can serve as a powerful tool for health promotion. First, the educational component of the groups provide a vehicle to influence the health behaviours of their members. The willingness of self-helpers to act on their health concerns may reflect this heightened awareness with regard to their health status. Second, by lessening the subjective distress among group members, self-help may have a direct impact upon illness episodes and medical-services use (Hinkle & Wolff, 1958).

TABLE 5 (continued)

HPQ Outcome Items, Health Service Utilization Questionnaire and Health Status Questionnaire

Item #	Factor Loading	Process Name	Item #	Factor Loading	Process Name
Factor 1: Constructive Health Action			**Factor 2: Perceived Helpfulness of Group**		
37	.841	Diarrhea	30	.744	Accepting Responsibility
35	.840	Cough	32	.713	Belonging
38	.840	Breath	28	.708	Self-esteem
41	.837	Heart	34	.677	Helpfulness
36	.823	Weakness	31	.606	Self-awareness
45	.811	Fever	33	.520	Trustworthiness
42	.801	Vomiting	29	.518	Behavioural Change
44	.789	Abdominal	61	.432	Resists
40	.775	Weight Loss			
39	.747	Indigestion			
43	.668	Joints			
51	.435	Health Worry			
Factor 3: Self-Reliance			**Factor 4: Health Distress**		
54	.763	Keeps Going	62	.737	Depression
52	.682	Avoid Doctor	63	.694	Capable
50	.665	Interference	64	.635	Anxiety
61	.565	Resists	55	-.609	Accepts Illness
56	.528	No Discussion	48	.517	Acute
33	-.479	Trustworthiness	56	-.420	No Discussion
60	-.467	Doctor			
32	-.432	Belonging			
Factor 5: Low Concern About Own Health					
57	.633	Others Worry			
51	.630	Health Worry			
58	-.603	Concern			
53	-.473	Family Worry			

RESUME

Le présent article se propose d'examiner si les effets de protection de la santé, comme la réduction de la maladie et de la détresse, peuvent s'étendre des réseaux primaires aux groupes d'entraide. Dans la première étude, on a comparé des groupes d'entraide à des groupes de contrôle composés de malades chroniques et de patients en urgence (acute illness); les mesures ont porté sur l'état de santé et l'attitude face à l'utilisation des services de santé. Dans la deuxième étude, on a examiné, dans un échantillon de membres qui sont malades chroniques ou handicapés, la façon de procéder des groupes d'entraide pour atteindre certains résultats.

Face aux problèmes de santé, les membres des groupes d'entraide ont manifesté un niveau de détresse égal à celui des membres du groupe de contrôle des patients en urgence; leur niveau de détresse était cependant moins élevé que celui des malades chroniques qui ne participent pas à des activités d'aide mutuelle. Les membres des groupes d'entraide se perçoivent comme étant davantage capables d'agir sur les problèmes de santé que les patients en urgence du groupe de contrôle. Enfin les processus de support mutuel sont liés à la perception des résultats positifs.

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