



Working Paper No. 23

June 1991

Chronic Stress, Social Support and Psychological Distress

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Subsequently published in '[The Role of Social Support in Mediating the Psychological Consequences of Economic Stress](#)', *Sociology of Health and Illness*, 1993 Vol. 15, No. 1, pp. 86-101

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*CHRONIC STRESS, SOCIAL SUPPORT AND
PSYCHOLOGICAL DISTRESS*

Abstract

The idea that social support can act as a buffer against the negative consequences of stress has been a particularly influential one. Most of the relevant research has focused on the impact of life events. In this paper we direct attention to the impact of chronic economic stress on psychological distress and the extent to which social support acts as a mediator. Social contact is found to be significantly related to psychological distress but its effect operates in a direct manner. Both instrumental and emotional support, however, serve to buffer the effects of extreme life-style deprivation. At low levels of deprivation, those lacking social support are more likely to be distressed but the strongest effects come when deprivation is high. Correspondingly, deprivation has a clear effect even when support is present but is at its most damaging when instrumental and emotional support are absent. While the pattern of interaction means that the effect of one factor is dependent on the other, overall extreme life-style deprivation is the most important factor, followed by emotional support and finally instrumental support.

Introduction

It is now generally accepted that the level of distress that people exhibit cannot be adequately predicted solely from the intensity of the sources of stress. Instead, people typically confront stress-provoking conditions with a variety of behaviours, perceptions and evaluations that are often capable of mediating the different conditions. Among the elements having a crucial place in the stress process, therefore, are those that can be invoked by people in their own defence. They are referred to collectively as "mediators". Here we are particularly concerned with the hypothesis that the availability of social support may provide a buffer against the psychological consequences of chronic stress.

The Role of Social Support in Mediating the Impact of Economic Stress

Social support means access to, and use of, individual groups or organisations in dealing with life's necessities. Although a number of scholarly efforts have sought to bring some clarity to an area surrounded by considerable ambiguity, the term *social support* continues to reflect inconsistency in meaning and usage (Pearlin, *et al.*, 1991). Two general approaches have dominated the area.

- (i) Those looking at objective social conditions such as marital status, household composition, reported frequency of interaction with kin, friends and neighbours and membership of clubs and organisations.

- (ii) Those looking at the individual's sense of having fulfilling personal relationships.

The first type are actually measures of social integration or social isolation rather than social support.

Presumably the structural density of a person's network, the number of relationships, and the frequency of contact, increase the probability of fulfilling personal relationships but they don't guarantee it. (Mirowsky and Ross, 1986; 33).

House and Kahn (1985) note that data relating to the existence and quantity of social relationships to health are impressive in quality and volume. The existence of quantity of contact with friends and relatives has been found to produce lower rates of psychological and physical distress and mortality. Membership in voluntary organisations has also been shown to have positive effects.

While such measures are clearly more accurately described as measures of social contact, they are often found to behave like measures of social support. Furthermore, social relationships must exist in some quantity before they can perform a supportive function. Isolated persons with few or no social relationships would appear to be particularly at risk.

The second definition of social support emphasises the functional content of relationships such as the degree to which they involve flows of affection, emotional concern or instrumental or tangible aid. Socio-emotional aid usually refers to assertions or demonstrations of love, caring, esteem, value, empathy, sympathy. Instrumental aid refers to

the actions or materials provided by others that enable the fulfilment of obligations. Measures of instrumental support may assess the objective utilisation of support or the subjective perception that such aids are or could be available. It is the latter which appears most crucial. Thoits (1985) argues that what we describe as the effects of social support are a by-product of regularised social interaction and perceptions of belonging, security and self-esteem arising from such interaction.

One of the major debates relating to impact of social support on health has focused on whether support enhances health and well-being irrespective of level of stress or because social support buffers the effect of stressful experiences. The direct effect hypothesis argues that support enhances mental health irrespective of level of stress. This could come about through the perception that others will provide aid in the event of stressful occurrences or through a direct impact on feelings of self-esteem or mastery.

The buffering hypothesis argues that support exerts its beneficial effects by protecting people from the pathogenic effects of stress. Support may provide the resources which allow one to redefine the potential for harm posed by a situation and/or augment the ability to cope with increased demands (Cohen and Syme, 1985). One extreme example of such buffering is presented in the work of Brown and Harris (1978) in their development of a vulnerability model. The suggestion is that certain provoking agents such as severe life events

or major difficulties bring about depression. The likelihood of such experiences bringing about depression is greatly influenced by the presence of vulnerability factors such as lack of social support.

A review of the literature by Kessler and McLeod (1985) found strong evidence for the stress buffering role of social support. The general conclusions were that:

- (i) membership of affiliative networks did not have a buffering effect;
- (ii) emotional support clearly did;
- (iii) the evidence for instrumental support was mixed.

Evidence for a direct or marginal effect of support under conditions of low stress was found in one-third of the studies where the buffering effect was significant. Almost all of the studies in which buffering was not observed demonstrated direct effects. Kessler and McRae (1985; 232) note that while the traditional buffering hypothesis states that the impact of stress on mental health is stronger under conditions of low support than of high support, the alternative interpretation is that support and mental health are more strongly related under conditions of high stress than of low stress.

This alternative way of thinking of a buffer emphasizes that an assessment of a buffer effect inherently requires a comparison of support's predictive power across at least two different situations defined by the level of stress that characterises them (Kessler and McLeod, 1985; 232).

Life Events and Chronic Stress

The bulk of the research relating to the buffering role of social support has drawn on the life-events' theoretical perspective and employed the life-events inventory methodology.¹ The issue of whether the higher levels of psychological distress of lower status groups can be accounted for by differential responsiveness to life-events, arising from lower levels of social support, has been a central one.

Life events research has lacked a sociological character in that the structural contexts of people's lives are treated as if they were extraneous to the stress process (Pearlin, 1989). Increasingly, attention is being directed to the significance of events whose occurrence varies with people's key social and economic statuses and to the likelihood that events are proxy indicators of chronic hardship. While life-events may be associated with acute stress, chronic stress arises from the dogged slow-to-change problems of daily life, when pressures from the environment exceed the coping capacity of the person. The two types of stress converge when life-changes have an impact by increasing the number and level of day-to-day strains. The impact on emotional well-being in such cases arises not from change itself but from change that leads to hardship in basic enduring economic circumstances. The most striking example of this process is when unemployment leads to economic hardship and social isolation for both the individual and family.

In what follows it is intended to make use of data from a national survey of households in the Republic of Ireland to examine the extent to which social support can provide a buffer against the impact of chronic stress.

Sample and Description of Variables

The survey of Poverty, Income Distribution and State Services, carried out by The Economic and Social Research Institute, Dublin, in 1987, provides the database for our analysis. The survey was designed to provide a representative national sample. Interviews were conducted with all available adults in 3,294 households.² Our analysis in this paper is confined to married respondents since the full range of information on social support was available only for such respondents.

Psychological Distress

Psychological well-being was measured using the 12-items version of the General Health Questionnaire and the GHQ scoring procedure (Goldberg, 1972, 1978). In order to make it possible for the GHQ to be administered by interviewers, it was necessary to introduce some changes to the combinations of items and answer formats. The procedure adopted was intended to avoid grouping of "positive" or "negative" items or the need for repeated changes of response format. The approach taken was to divide the items into two groups of 6, each of which was allocated to one of the two possible response formats. The alpha coefficient for the 12-item scale

was found to be .82. The split half correlation coefficient between the sub-scales using changed and unchanged response formats was .73.³

Physical Health Status

Respondents were asked if they "had any major illness, physical disability or infirmity that has troubled you for at least the past year or that is likely to go on troubling you.

Life-Style Deprivation

The measures of economic stress we employ are based on the enforced absence of a range of life-style items. The choice of items to be included in the study was influenced by the range of indicators employed in other major studies of poverty. Mack and Lansley's (1985) items were chosen so as to exclude things which almost everyone has or very few people would miss. The 24 items on which our analysis is based are made up of 17 of the Mack and Lansley pool of items together with 7 additional items.

For each of 20 of the life-style items, the head of the households or household manager was asked:

- (i) whether the household had the item in question;
- (ii) if not, whether they would like to have it but must do without it due to lack of money;
- (iii) whether they felt the item was a necessity, i.e., "Is something that every household (or person) should be able to have and that

nobody should have to do without"?

In addition to the 20 items employing this format, the following set of items was included in the index, bringing the total number of items to 24:

- (i) Whether there was a day during the previous two weeks when the household manager did not have a substantial meal at all - from getting up to going to bed.
- (ii) Whether the household manager has had to go without heating during the last year through lack of money, i.e., having to go without a fire on a cold day, or go to bed early to keep warm or light the fire late because of lack of coal/fuel.
- (iii) Head of household has not had an afternoon or evening out in the last fortnight that costs money, because of lack of resources.
- (iv) (a) Household is currently in arrears on rent, mortgage, electricity and gas, or
(b) has had to go into debt in the last 12 months to meet ordinary living expenses such as rent, food, Christmas or lack of school expenses, or
(c) has had to sell or pawn anything worth #50 or more to meet ordinary living expenses.

In our subsequent analysis we distinguish two dimensions of life-style deprivation. The first dimension which we label *primary life-style deprivation* involves the enforced absence of socially defined necessities such as new clothes, two pairs of shoes a warm overcoat, a roast or its equivalent once a week, a meal with meat, chicken or fish every second day or living in a household which is experiencing severe debt problems or in which the household manager is experiencing extreme food and heat deprivation. *Secondary deprivation* involves the enforced absence of a daily newspaper, a hobby, central heating, car, telephone, annual holidays or being unable to save or afford an afternoon or evening out in the previous two weeks.

The primary life-style deprivation will serve as our indicator of chronic stress and it is the interaction of social support with this measure in predicting psychological distress which is of major interest to us.

Social Support

Social contact was measured through by means of the following items.

- (i) Frequency of contact, including visits, phone calls, meeting in the street or in the club, etc., but excluding letters with
 - (a) relatives (children, parents, brothers, sisters, etc.) living outside the household;
 - (b) neighbours;
 - (c) friends.

Instrumental support was tapped by asking the head of household and the household manager:

If you were to get into financial difficulty do you think any of your relatives (outside the household) would help out?

With regard to emotional support respondents were asked,

(i) If you had very personal problems or worries, who would you turn to first to talk about them?

(ii) Who is the best person to talk to when you are really upset about things?

The information we obtained, from the head of household and household manager regarding instrumental support, was generalised to all household members; our measure thus becomes whether the individual is a member of a household where either of these informants indicates that it is improbable that relatives would help out in the event of economic difficulties. Respondents were scores as low on emotional support if they indicated that their spouse was not the person in whom they would choose to confide in relation to personal problems, or the best person to talk to when they were really upset.

Chronic Stress and Psychological Distress: The Buffering Role of Social Support

Our analysis assumes that economic stress and social support are causally prior to social support which in turn

affects psychological distress. Given that our data are cross-sectional, we cannot use them to demonstrate the validity of these causal order assumptions. However, evidence from longitudinal data support the model and it is clearly possible for the data to fail to support our model, if given our assumptions, we fail to find effects (Ross and Mirowsky, 1989).

In Table 1 we show the relationship between primary life-style deprivation and our three measures of social support to psychological distress.

The most striking finding is undoubtedly the strength of the relationship between economic stress as indexed by primary

Table 1: *Distribution of GHQ Scores by a Primary Life-style Deprivation and Social Support*

<i>Primary Life-Style Deprivation</i>	<i>Mean GHQ Score</i>	<i>Social Contact</i>	<i>Mean GHQ Score</i>	<i>Instrumental Support</i>	<i>Mean GHQ Score</i>	<i>Emotional Support</i>	<i>Mean GHQ Score</i>
0	0.65	Present	1.03	Available	0.94	Available	0.87
1	1.23						
2	1.83	Absent	2.17	Unavailable	1.56	Unavailable	1.68
3	2.30						
4	3.15						
5+	3.73						
Eta ²	.135	.005		.014			
p	1.001	1.001		1.001			
N	4,228	4,330		4,246			

life-style deprivation and scores on the general health questionnaire. The GHQ scores vary from 0.65, with scores of zero on the deprivation scale to 4.73 of these with scores of 5 or higher and almost 14 per cent of the variance is accounted for. In order to assess the impact of the social contact variable, it is necessary first to take into the distribution of respondents on each measure. Our overall measure of social contact distinguishes between those who have contact with relatives or friends or neighbours; less than 1.5 per cent of our respondents found themselves in this situation. On the other hand, almost one in six lacked instrumental support and over one in five emotional support, as we have defined them. Each of these types of social support is significantly related to emotional distress. Those without social contact have scores which are twice as high as those experiencing such contact; those for whom instrumental support is unavailable have scores almost two-thirds higher than those who can avail of such support; while those deprived of emotional support score almost twice as high as those who can depend on such support.

From Table 2 we can observe that primary life-style deprivation is related to lack of support of each type with those scoring above the minimum level being over twice as likely to lack social contact and 50 per cent more likely to lack instrumental and social support. The observed relationships, however, are sufficiently modest to ensure that no particular difficulty is created for estimating

independent social support and economic stress effects. Furthermore, the relationships between the three types of support are extremely weak.

Table 2: *Social Support by Primary Life-style Deprivation*

<i>Primary Life-style Deprivation</i>	<i>Social Contact Absent</i>	<i>Instrumental Support Absent</i>	<i>Emotional Support Absent</i>
0	1.1	14.5	18.3
1+	2.4	23.1	27.9
Total	1.5	17.2	21.3

In Table 3 we set out the impact of primary life-style deprivation and social support and their interaction on psychological distress while controlling for physical health status and secondary life-style deprivation. Although our measure of social contact is not a measure of social support *per se*, such indicators are often found to behave like measures of social support. The available evidence suggests that isolated persons with few or no social relationships would appear to be particularly at risk. We might expect therefore that the relationship between social contact and psychological distress will not necessarily take a linear form. Rather we would expect that lack of contact has an effect only when it goes beyond a certain point. Our own results are consistent with this hypothesis. It is for this reason that social contact has been entered into the

regression in the form in which it has and our results do show that extreme isolation increases psychological distress. Our analysis employing a measure of chronic stress confirms the conclusion arising predominantly from life-event studies that there is no significant interaction between social contact and stress.

Table 3: *Regression of Determinants of Psychological Distress (Standardised Beta Coefficients in Parentheses)*

	b
Primary Deprivation	.68 (.45)***
Instrumental Support	-.15 (-.03)*
Primary Deprivation x Instrumental Support	-.13 (-.07)**
Emotional Support	-.44 (-.09)***
Primary Deprivation x Emotional Support	-.11 (-.06)**
Social Contact	-.54 (-.03)**
Secondary Deprivation	.14 (.12)***
Physical Health Status	1.00 (.19)***
Constant	0.99
R ²	.211
F	141.5
N	4,220

*** p < .001

** p < .01

* p < .1

On the other hand, consistent with the buffering hypothesis there are significant interactions between both

primary life-style deprivation and both instrumental and emotional support and it becomes essential to consider the joint impact of these variables.

The significant interactions between primary life-style deprivation and instrumental and emotional support indicate that such deprivation has a strong effect at low levels of support. Of course, it is also true that social support has its strongest effects at higher levels of primary deprivation. The latter statement would not be true if following Brown, *et al.* (1986) we conceived life-style deprivation as a provoking agent, and social support as a vulnerability factor. In this case our model would specify that while deprivation can affect distress when support is absent, lack of social support cannot provoke distress in the absence of an appropriate stressor. However, as Cleary and Kessler (1982) emphasise, the distinction between provoking and vulnerability agents is a distinction better thought of as of a theoretical rather than empirical kind.

The reason why this is so is that the kind of conclusion which Brown, *et al.*, wish to draw is meaningful only if we have great confidence in the zero points of our scales. Given the nature of social science data, we are seldom certain that the zero point of a scale is *the* correct one. Thus, in our case, respondents whom we describe as lacking social support are probably best thought of as having low levels of social support rather than none. Similarly, a zero score on the deprivation scale represents a low score on an underlying

deprivation measure which is theoretically continuous. Consequently, it is more appropriate to consider the reciprocal interaction between our variables.

In Table 4 we attempt to illustrate the pattern of effects of support and primary deprivation. The table documents the differences between respondents who are identical in all respects other than their situation in relation to primary deprivation, instrumental support and emotional support. It must be stressed that we are concentrating on *relativities* rather than absolute scores. The reference point for this analysis is those respondents with scores of 0 on the primary deprivation scale who have access to both instrumental and social support. We have chosen to compare those with scores of 0 to 4 on the deprivation measure. It is obvious that for both groups, as social support declines, distress increases. The rate of increase is greater, however, at the higher level of deprivation. As we move from the most favourable to the least favourable situation in relation to support, the GHQ score rises by 0.59 at the lower level of deprivation and by 1.45 at the higher level. We can also observe that it is emotional support which has the strongest effect at both levels. While the impact of social support is clearly substantial, primary life-style deprivation continues to be the dominant influence. When all other factors are controlled for, respondents who lack four primary items but have both instrumental and social support available have GHQ scores of

.69 of a unit higher than those lacking both instrumental and emotional support but none of the primary items.

Table 4: *Illustration of the Impact of the Interaction of Primary Life-Style Deprivation and Social Support in their Impact on Psychological Distress*

	<i>Primary Life-Style Deprivation Score 0</i>	<i>Primary Life-Style Deprivation Score 4</i>
Instrumental and Social Support Present	0.00	1.28
Instrumental Support Lacking	0.15	1.77
Emotional Support Lacking	0.44	2.05
Instrumental and Social Support Lacking	0.59	2.73

Conclusions

The major influence on psychological distress is exposure to chronic economic stress. Even when instrumental and emotional support are available, enforced deprivation of socially defined necessities has a substantial impact on emotional well-being. Social support, however, does play an important buffering role.

Both support variables have substantial effects but to be understood they must be considered jointly with primary life-style deprivation. At low levels of deprivation those lacking support are more likely to be distressed but the

strongest effects come when deprivation is high. Correspondingly, primary deprivation has a clear effect when support is present but is most damaging in situations where support is absent. While the pattern of interaction means that the effect of one factor is dependent on the other, overall primary life-style deprivation is clearly the most important factor, followed by emotional support and finally instrumental support.

While our results show that social support can play an important buffering role, it is important that social support does not come to be seen as a panacea. Not all networks are supportive (Ratcliff and Bogdan, 1988). Furthermore, our understanding of how to intervene in order to create types of social support which can substitute for a complement "spontaneous" support is restricted by the limited number of systematic evaluations of support interventions (Kessler and McLeod, 1985). Important strategies of intervention such as Community Work have tended to focus on the process "to the point of excluding a proper concern with results". (Chanan and Vos, 1989, 55).

Finally, it must be stressed that many supporting this depend on adequate funding of basic social and income maintenance programmes (Schilling, 1987). However, despite such reservations, it is worthwhile noting that many policy interventions, while justified in terms of job creation, are, in fact, responses to a broader range of social needs in areas which carry multiple deprivations. There would appear

to be value in an explicit recognition of this reality, and in encouraging responses which recognise the relevance of resource and support issues and which have the potential to give the deprived access to categories of experience previously denied to them.

Acknowledgements

I would like to acknowledge the debt I owe to all of my ESRI colleagues who participated in the Survey of Income Distribution, Poverty and Usage of State Services. More particularly, I would like to acknowledge the significant contributions of Damian Hannan and Sean Creighton to the work on life-style and psychological distress reported in the paper.

Notes

1. The discussion here relates to research employing the standard life event inventory approach in which each broad type of event is 'weighted' in terms of the propensity to produce change and disruption. The LEDS approach employed by Brown and Harris (1978) raises issues which go beyond the scope of this paper.
2. The response rate was 64.3 per cent. A re-weighting scheme was developed to correct for identified biases based on the 1986 Labour Force Survey. A second stage re-weighting at the individual level was undertaken to allow for non-response within households. Detailed descriptions of the survey are provided in Callan, *et*

al. (1989) and Whelan, *et al.* (1990).

3. See Whelan, *et al.* (1990:23-5) for a more detailed discussion.
4. These dimensions were stratified using Muthens (1970) Generalised Least Squares procedures for the factor analysis of dichotomous items as incorporated in the computer programme Liscomb.
5. Considerations of both parsimony and meaning dictate that primary deprivation should take precedence over secondary deprivation. In effect the procedure we adopt is one of semi-partial correlation where secondary deprivation is a residualised variable from which the effect of primary deprivation has been removed.

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