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The Impact of Sense of Control and Social Support on  
Psychological Distress: A Test of the Hypothesis of  
Functional Substitution

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### Abstract

The purpose of this paper is to explore the relationship between sense of control and perceptions of social support particularly as it affects psychological distress. The results provide no evidence for the displacement hypothesis whereby the benefits of social support involve costs in terms of independence. Consistent support, however, is found for the functional substitution hypothesis. The conclusion is unaffected by the introduction of distinctions relating to types of support and types of power.

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## INTRODUCTION

The level of psychological distress that people exhibit cannot be adequately predicted from the intensity of the sources of stress. People confront stress-provoking conditions with a variety of behaviours, perceptions and evaluations that are often capable of mediating the impact of objective conditions. Sense of control and perception of social support have consistently been proposed as providing crucial links between social position and emotional well-being.

In this paper we wish to address the following issues.

- (i) To what extent do sense of control and social support mediate the impact of social background on psychological distress?
- (ii) What is the nature of the relationship between sense of control and support. Do the obligations imposed by participation in social networks limit independence?
- (iii) Does the relationship between sense of control vary by type of control or type of support?

### *Sense of Control and Social Support*

Powerlessness/fatalism, or alternatively mastery, has consistently been identified as the most important belief in affecting an individual's level of distress. Seeman defined powerlessness as "the expectancy or probability, held by the individual, that his own behaviour cannot determine the

occurrence of the outcomes or reinforcements he seeks" (Seeman, 1959, p. 784). As Mirowsky and Ross (1986, p.26) point out, the importance of powerlessness is recognised in a variety of social and behavioural sciences. Thus, in psychology the concept of powerlessness appears in a variety of forms, ranging from "learned helplessness" to "belief in external control".

The distinction between fatalism and psychological disorder follows a well established tradition which both distinguishes and assumes a causal relationship between fatalism-like concepts and disorder-like concepts (Wheaton, 1980; 1983). The model underlying this approach predicts that, for example, a lower class position will socialise individuals to be more fatalistic in their causal perceptions and that fatalism will increase one's vulnerability to psychological disorder primarily because it undermines persistence and effort in existing situations. The connection between emotional distress and lack of control can be traced back to Seligman's (1974, 1975) laboratory experiments in which dogs were exposed to a series of uncontrollable and inescapable shocks. The motivational and emotional consequences of these experiences was described as 'learned helplessness'. Rotter (1966) in developing these ideas stresses that the consequences of particular experiences depends upon whether the individuals see a causal relationship between their own behaviour and the rewards or punishments they experience.

More recently Mirowsky and Ross (1990) have distinguished between realistic and illusory control. Realistic control is that which can be predicted from an individual's status/resources, while illusory control is defined as the deviation of measured sense of control from predicted control. Thus:

$$\text{realistic control} = c = b_0 + b_1 s$$

$$\text{illusory control} = (c - \hat{c})$$

where they represent status/resources.

We are primarily concerned with social support understood as having access to fulfilling personal relationships. Thus we are emphasising the functional content of social relationships rather than social contact *per se*. One interpretation of how such effects operate, in relation to emotional support, is offered by Thoits (1985). What we describe as the effects of emotional support may be seen to be a by-product of regularised social interaction. Positive feedback from role partners affects perceptions of belonging, security, self-esteem and efficiency which in turn are central indicators of well-being. There are a variety of competing views concerning the relationship between sense of control and social support. Our interest centres on the displacement and functional substitution perspectives. While our earlier reference to Thoits' interpretation of emotional support implies that support should enhance feelings of control, alternative interpretations are possible. The

displacement perspective suggests that social support may detract from feelings of control (Ross and Mirowsky, 1989: pp. 208-209). Social support implies a network of reciprocity and mutual obligation that may limit independence.

One of the reasons why women are more distressed than men is that women have more personal ties and are more distressed by the undesirable events that occur in the peripheries of their networks (Kessler and McLeod, 1984). Social support may have costs in terms of reduced autonomy not only for those who give support but also for those who receive it. The exchange/power model of family relationships views interaction between the older family members and their middle-aged children as a process in which the relative power of the members determine the conditions of the exchange. Income and health, in particular, are viewed as critical resources, the lack of which places an individual in a disadvantageous, dependent situation. Old people are faced with the struggle to maintain a sense of independence and control in the face of lowered income and declining physical stamina. Non-material resources such as compliance, esteem and approval, may serve as substitutes but rather than endure the embarrassment or humiliation that frequently accompanies an unbalanced social exchange, many people opt for disengagement. However, Dowd and La Rossa (1982, pp. 185-186) argue that in the context of family relationships an unbalanced exchange may persist due to the "permanent bond". The desire of the elderly to live apart from their children

and to maintain "intimacy at a distance" is interpreted as an attempt to minimize the costs associated with dependency. Some empirical support for their argument is provided by the finding they report that the effect of contact with children and grandchildren on morale was significantly more negative for older males with poor health. Occupational retirement is viewed as precipitating

... a family drama in which the middle-aged (ascending) generation assumes leadership through a gradual process of redefining the former "provider" as non-productive and, therefore, dependent.

Other studies which have focused on the consequences of dependency among the elderly provide support from the exchange/power perspective. There is considerable evidence that the elderly frequently do not wish to call in their debts and become a burden on their children (Connidis, 1983; Troll, 1971).

Furthermore membership of a supportive network does not guarantee that the content of network communications will be supportive. The case of a working mother surrounded by "caring others" who deny the legitimacy of her job activity illustrates this point (Ratcliff and Bogdan, 1988). Thus there are a variety of ways in which support may result in limited autonomy and loss of control over one's life.

The functional substitution hypothesis suggests that support and control can substitute for another in reducing psychological distress. According to this perspective, control and support are alternative means of reducing

perceived threats

"Control provides confidence in one's ability.  
Support provides confidence in one's worth".  
(Ross and Mirowsky, 1989, pp. 208-209).

If this assumption is correct, control is most beneficial when support is low. Similarly support has its greatest impact when control is low.

In what follows we make use of the data from the Survey of Poverty, Income Distribution carried out by The Economic and Social Research Institute in 1987 in order to assess the relative merits of these approaches.

The survey was designed to provide a representative national sample of all households. Interviews were conducted with all available adults in 3,294 households. Post-sample correction, through reweighting of results to take into account inter and intra household non-response, was employed. More detailed discussions of the sampling procedures can be found in Callan, *et al.*, 1989, and Whelan, *et al.*, 1991). For the purposes of the present paper our attention is restricted to the married sample where the full range of variables is available to us.

### *Psychological Distress*

Psychological well-being was measured using the 12 items version of the General Health Questionnaire and the GHQ scoring procedure (Goldberg, 1972, 1977). 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.

### *Control*

In measuring control we have employed a set of items which have been fairly widely employed in the literature (Pearlin *et al.*, 1981). The statements to which respondents reacted were as follows:

- (i) I can do just about anything I set my mind to.
- (ii) I have little control over the things that happen to me.
- (iii) What matters in the future depends on me.
- (iv) I often feel helpless in dealing with the problems of life.
- (v) Sometimes I feel I am being pushed around in life.
- (vi) There is really no way that I can solve some of the problems that I have.

The response format ranged from "Strongly agree" to "Strongly disagree". The alpha reliability coefficient is .68. The items are scored so that a high score indicates strong feelings of control or a low score strong feelings of fatalism. The scores were averaged and the variable is thus a

potential range of scores going from "1" to "4".

### *Social Support*

*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 scored as low on *emotional support* if they indicated that their spouse was not the person in whom they would choose to confide in in relation to personal problems, or the best person to talk to when they were really upset.

Our overall measures of *social support* is arrived at by summing the scores on instrumental and emotional support.

### *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".

### *Unemployment*

The concept of unemployment adopted in this study, like that in the Census and Labour Force Survey is dependent upon the respondent's evaluation of their own employment status. Inability to work due to permanent illness or disability is also distinguished.

### *Life-Style Deprivation*

The measures of financial 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 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 were 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  
(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 or 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.

### *Results*

Our choice of socio-demographic variables was influenced by our previous work relating to the determinants of psychological distress (Whelan *et al.*, 1991). From Table 1 it can be seen that the inclusion of sense of control and perceived social support in equation (ii) leads to fairly substantial reductions in the impact of life-style deprivation, gender and physical health status on psychological distress. More modest efforts are observed for the labour force variables while the negative impact of age increases significantly.

In Table 2 we look at the relationship between control and social support in order to provide an assessment of the displacement hypothesis. It is clear that the observed results run in the opposite direction to that suggested by the hypothesis. Level of control rises from 2.49, when both types of support are absent to 2.70 when both are present. Multivariate analysis demonstrates that this positive

correlation between control and social support persists even when we allow for the influence of a variety of background

Table 1: *Multiple Regressions Illustrating the Role of Sense of Control and Sense of Support in Mediating the Impact of Socio-Demographic Background on Psychological Distress*

	(i)	(ii)
Primary Deprivation	.46***	.31***
Secondary Deprivation	.11	.01
Physical Health Status	1.01***	.68***
Unable to Work due to Permanent Illness or Disability	1.09***	.93***
Unemployed	.36	.34
Unemployed x Gender	.75**	.57*
Gender	- .29***	- .12*
Age	- .003	- .012***
Sense of Control		- 1.61***
Social Support		- .38***
Intercept	.71	6.09
R <sup>2</sup>	.217	.314
p	< .001	< .001
N	4,213	4,213

\*\*\* p < .001    \*\* p < .01    \* p < .1

Table 2: *Sense of Control by Level of Social Support*

	<i>Mean Sense of Control</i>
Instrumental <i>and</i> Emotional Support Absent	2.49
Instrumental <i>or</i> Emotional Support Present	2.58
Instrumental and Emotional Support Present	2.70
Total	2.65
Eta <sup>2</sup>	.024
p	< .001
N	4,239

variables. Thus, while there are undoubtedly a variety of situations where the price paid for social support includes reduced autonomy, the hypothesis of a generalised displacement effect must be rejected.

Turning our attention to the functional substitution hypothesis, in Table 3 we provide an explicit test of this hypothesis employing our overall measures of control and social support. The results provide strong evidence in favour of the hypothesis. Both control and social support are associated with significant reductions in levels of emotional distress. The coefficient reflecting interaction of control and support is positive and highly significant. Thus the importance of a strong sense of control is greater when social support is absent. Correspondingly social support plays its most vital role for fatalists. Control and support are indeed functional substitutes. When one is absent the other fills the breach.

In Table 4 we provide the evidence relevant to an assessment of whether the distinction between instrumental and emotional support has any implications for the functional substitution hypothesis. The results are entirely unambiguous with both component of support interacting with control in precisely the manner required by the hypothesis. Indeed, once we have taken into account sense of control and its interaction with the support variables, the marginal effects of both types of support are remarkably similar.



Table 3: *Multiple Regression Testing the Functional Substitution Hypothesis*

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	b
Control	- 3.49***
Support	- 2.76***
Support x General Intercept	.89***
R <sup>2</sup>	.226
P	< .001
N	4,113

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\*\*\* p < .001

Table 4: *A Test of the Functional Substitution Hypothesis Distinguishing between Instrumental and Emotional Support*

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	b
Emotional Support	- 2.79***
Emotional Support x Control	.84***
Instrumental Support	- 2.80***
Instrumental Support x Control	.97***
Control	- 3.54***
Intercept	11.02
R <sup>2</sup>	.228
P	< .001
N	4,113

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\*\*\* p < .001

In view of this evidence we proceed to consider the consequence of distinguishing between types of control employing our overall measure of social support. While our earlier analysis has shown that support may substitute for control, the possibility exists that this may hold for illusory control only and not for realistic control. In that case social support would be seen to function as a substitute for optimism but not for power.

In fact support interacts significantly with both realistic and illusory power. Social support provides an alternative to optimism and power in protecting our emotional well-being and, similarly optimism and power can reduce the need for social support.

Table 5: *A Test of the Functional Substitution Hypothesis Distinguishing Between Realistic and Illusory Control*

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	b
Realistic Control	- 5.17***
Realistic Control x Social Support	1.03***
Illusory Control	- 3.02***
Illusory Control x Social Support	.86***
Support	- 3.02***
Intercept	15.23
R <sup>2</sup>	.251
p	< .001
N	4,113

*Conclusions*

The starting point of this paper was the controversy relating to the nature of the relationship between sense of control and perceived social support. The results of our analysis are entirely unambiguous. They provide no support for the hypothesis of a generalised displacement effect in which social support has as its price, reduced independence.

On the other hand the analysis provides consistent support for the hypothesis of functional substitution hypothesis. For those who are powerless the enhanced self-esteem, security and sense of belonging produced by social support buffers against emotional distress. For those who lack the positive feedback arising from such interaction, confidence in one's ability is crucial. These conclusions are not affected by distinctions between types of social support or control.

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