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The Role of Income, Life-Style Deprivation and Financial Strain in Mediating the Impact of Unemployment on Psychological Distress

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## Abstract

The Role of Income, Life-Style Deprivation and Financial Strain in Mediating the Impact of Unemployment

Reactions to unemployment are the outcome of complex interactions between the psychological condition of the individual and the economic circumstances of the household. Despite the increasing volume of research on the relationship between unemployment and mental health, consideration of the relationship between economic and psychological problems remains remarkably rare. The available evidence suggests that income has no direct effect but has its effect primarily through its relationship to financial strain.

the absence of a systematic analysis of relationship between income, life-style deprivation. financial strain and psychological distress, our ability attribute causal significance to the impact of financïal strain must remain extremely limited. Such an analysis requires that we have available to us household measures income and resources which we can employ as predictors financial strain and psychological distress. The analysis reported in this paper is based on a national sample of 3,294 households in the Republic of Ireland conducted in which contains such information.

In conducting this analysis we draw on psychological and sociological perspectives in order to move beyond a life-event approach to unemployment and demonstrate the impact on emotional well-being of change that leads to

hardship in basic enduring economic circumstances. In particular our analysis demonstrates, more clearly than previous work, the crucial role of life-style deprivation of a very basic kind, involving the enforced absence of socially defined necessities. Such objective exclusion from customary life-styles is associated with the constant need to engage in "economic brinkmanship". When economic pressures exceed the coping capacity of the person, increased levels of psychological distress ensue.

# THE ROLE OF INCOME, LIFE-STYLE DEPRIVATION AND FINANCIAL STRAIN IN MEDIATING THE IMPACT OF UNEMPLOYMENT ON PSYCHOLOGICAL DISTRESS

In attempting to answer the question raised in the call for papers for this issue regarding the influence of conceptual, social and ideological factors on our current understanding of the consequences of unemployment, a compelling case can be made that with hindsight the most striking feature of the current literature will be seen to be its remarkable lack of emphasis on poverty.

No originality is claimed in making this observation. Kelvin and Jarret (1985) note that while there is widespread recognition that unemployment brings both economic psychological problems, consideration of the relationship between the problems is remarkably rare. Similarly Fryer in a number of recent publications has drawn attention to the fact that while financial hardship is repeatedly mentioned in literature it is not allocated a central role pervasive evidence for believing that poverty is a crucial aetiological factor in unemployment experience. consequence, he argues, classic studies have been interpreted in a particularly one sided fashion; the manifest and latent functions of employment have become reduced to the latter and sight has been lost of the impact of declining resources agency or coping capacity (Fryer, 1986, 1988; Fryer and Payne 1986). It has become clear, as Kelvin and Jarret (1985:18)

note, that while those concerned with the psychology of work have long stressed that work provides much more than merely money; those concerned with unemployment need to stress that to be unemployed is frequently to be poor.

It is beyond the scope of this paper to offer a detailed interpretation of this partiality. One influence has been the tendency to view unemployment from a life-event perspective and to label is as an acute stressor. From this perspective unemployment fits readily within the stressful life More recently, however, a number of authors have emphasised the need to take into account the process through which events adversely restructure social and economic conditions of life (Pearlin 1990, Mirowsky and Ross, Chronic stress arises from the dogged - slow to change problems of daily life when pressures from the environment exceed the coping capacity of the individual. The two types stress converge when life changes have an impact increasing the number and level of day-to-day strains. impact on emotional well-being in such cases arises not change itself but from change that leads to hardship in basic enduring economic and social circumstances. The most striking example of this process is when unemployment hardship and social isolation both for the individual and their family (Pearlin et. al., 1981, Ross and Huber, 1985).

Even those studies which have examined the impact of financial hardship, in general, have failed to draw on the

wider psychological and sociological literature relating to poverty or relative deprivation. As a consequence, as Ullah observes, there exists a great deal of confusion regarding the manner in which the relationships between unemployment income and financial hardship are conceptualised (Ullah, 1990).

The evidence available from the limited number of empirical studies that have used multivariate analysis when assessing the association between income and psychological health indicates that the expected pattern of association between financial hardship and psychological health during unemployment is found when using subjective measures of the former but not when employing objective measures (Ullah, 1990).

A second distinction is that between direct and indirect effects of income. Some explanations, Ullah (1990) notes, have emphasised the indirect effect 0f income on psychological health through its impact on social and leisure activities. Others, he suggests, point to the possibility of direct effects on aspects of well-being such as one's sense of value and status although none offer an explanation of how income might be directly related to mental health. hardly surprising that such explanations have not forthcoming. Whatever the merit of the statistical distinction between the direct and indirect impact of income, for neither psychologists nor sociologists can income per provide an adequate explanation of psychological health

the absence of an understanding of the psychological processes involved and their social context. We have substantial evidence available to us from other areas of research, such as job satisfaction and equity evaluation, that attempts to explain complex subjective phenomena on the basis of variables such as income without attention to the interpretative processes involved provide a very poor return on effort expended (Adams, 1963, Goldthorpe et al. 1968, Locke 1969).

Different conceptual frameworks suggest varying, but not necessarily competing, ways of measuring financial hardship or strain and different conclusions about the appropriate unit of analysis. Should one measure

- (i) the income of the individual or the household?
- (ii) income or life-style deprivation?
- (iii) reduction in income on an absolute or proportional basis?
- (iv) deviation of income from the norm for a potentially critical reference group?

The research available to us pays very little attention to such issues. As a consequence the conclusion that subjective measures of financial hardship are related to psychological health, while income is not, does not really take us very far. Without an understanding of how objective deprivation is related to perceptions of financial strain it is impossible to be sure that the direction of causality is not the opposite to that hypothesised.

In the analysis that follows we will demonstrate when income is measured in the appropriate manner with financial strain associated and significantly psychological distress. Furthermore, it will be possible to show that the impact of income on psychological distress be accounted for entirely by the relationship of the former to life-style deprivation of a fundamental kind. Once such objective deprivation has been taken into account financial little in the way additional contributes οf explanatory power. Thus while reference to psychological responses to material deprivation is an essential part of any the processes involved adequate account of the relationship between unemployment and psychological health, the causal priority of objective deprivation is clearly established.

### Method

#### Sample

The Survey of Poverty, Income Distribution and Usage of State Services carried out by the Economic and Social Research Institute, Dublin in 1987 provides the database for our analysis. A detailed description of this survey is provided in Callan et al. (1989) and Whelan et al. (1990). The survey was designed to provide a national sample from the population of the Republic of Ireland resident in private households. The sampling was performed using the RANSAM programme developed at the Institute, described in detail in Whelan (1979).

#### Procedure

All interviews were conducted through personal visits.

The response rate was 64.3 leaving a sample for analysis of 3.294 households.

A reweighting 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.

Measures

Psychological well-being was measured using the 12 version of the General Health Questionnaire (Goldberg, 1978) and the GHQ scoring procedure. In order to make possible for the GHQ to be administered by interviewers was necessary to introduce some changes to the combinations items and answer formats. The procedure adopted was intended to avoid grouping of 'positive' or 'negative' items the need for repeated changes of response format. approach taken was to divide the items into two groups of 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 unchanged response formats was .73. (Whelan et al., 1990, p. 20).

The concept of unemployment adopted in this study, like that in the Census and Labour Force Survey, is dependent upon the respondents' evaluation of their own employment status.

The income concept employed covered income from employment and all other regular receipts. The focus was on current weekly income measured on a weekly basis for employees and on an annual basis for the self-employed. The general practice of concentrating on disposable income unit used was also followed. The income recipient household. Account was taken of the differing size and composition of households through the customary approach whereby adult equivalence scales are used.

The choice of life-style deprivation items to be included in the study was influenced by the range of indicators employed in other major studies of poverty (Townsend, 1979; Mack and Lansley, 1985). 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 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) Debt Problems

- (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 attempting to measure perceptions of economic hardship 'heads of households' and 'household managers' were asked, taking into consideration the household's total income, if the household was able to 'make ends meet'. Influenced by the results regarding the relationship between

life-style deprivation and psychological health which will be presented later, attention was concentrated on the contrast between those respondents experiencing 'great difficulty' and all others. Individuals were allocated to the former category if either the head of household or the household manager responded in this fashion.

#### Results

In discussions of the criteria which should be applied to items making up a deprivation index, so that reasonable conclusions regarding poverty can be reached, there are two recurring themes. The first is necessity. Mack and Lansley (1985, p. 39) approach this issue by explicitly taking into account the prescriptions of the community while at the same time recognising that "meanings" are socially constructed. Their aim is to 'step outside the individual's feelings to the judgement of society collectively'. They thus define poverty in terms of an enforced lack of socially perceived necessities. This is broadly the position that will be adopted here.

The second theme, although frequently less explicit, is perhaps even more important. It centres on the relationship of specific deprivations to other aspects of deprivation and, by implication, to resources. Mack and Lansley (1985, p. 41) while terming the enforced lack of any socially perceived necessity a deprivation, conclude that such deprivations will be termed poverty only when they affect a person's way of life. They assume that `poverty is a situation where such

deprivation has a multiple impact on a household's way of life' (Mack and Lansley, 1985, p. 171).

Similarly, Ringen (1987, p. 161) takes the criterion of exclusion from one's society to involve a standard of living which is characterised as a state of general deprivation.

The foregoing brings out the need for a systematic analysis of the dimensions of life-style deprivation. Such analysis has been almost entirely absent in the poverty literature.

In developing scales or indices of deprivation, Townsend and Mack and Lansley assumed a single underlying dimension of deprivation. It would seem more appropriate to actually test whether the responses to the items used to measure this concept represent a singular underlying dimension of deprivation. Examination of the 24 items would suggest that there are different types of underlying "deprivations" involved and that individuals or families might well be highly deprived on some of them without being deprived on others.

We hypothesised three underlying dimensions.

(i) A Primary Life-Style Deprivation Factor referring to lack of basic food, clothes, heating, etc., current consumptions items all of which have to be paid for mostly from current income. The items making up this dimension should have relatively low levels of non-possession and high levels of socially defined necessity.

- should include items which refer to exclusion from basically middle class or comfortable working class life-style patterns and which might be expected to include holidays, leisure activities and consumer durables with significant current expenditure costs associated with them. Here we expect much higher levels of non-possession and lower levels of socially defined necessity.
- (iii) Housing Deprivation Factor. This factor would be expected to include characteristics relating to housing quality and facilities. Deprivation on this factor might be expected to have a significantly lower level of association with current income for a number of reasons. The factors influencing this relationship include the relationship between housing quality and age and life cycle, the impact of public housing and the fact that households which are currently on low incomes may have purchased these items some time previously.

In order to pursue these hypotheses we make use of factor analysis. Since there are a number of problems involved in the application of conventional factor analysis procedures to dichotomous items we have made use of Muthen's (1978) Generalised Least Squares procedures as incorporated in the computer program Liscomp (Muthen, 1988; Mislevy, 1988).

For the 20 items for which we have data on absence and enforced absence we have concentrated exclusively on the latter. Together with the additional 4 items, they were entered into a factor analysis specifying a 3 factor solution. The results of this analysis are set out in Table 1 and provide an unambiguous picture. (Table 1 about here).

The items which load on the first factor which we have labelled primary lifestyle determination.

In order to develop a measure of primary deprivation which can plausibly be interpreted as the life-style component of poverty, we have avoided including items in the index which while having their highest loading on this factor have loadings on other factors which are not a great deal lower. This criterion and substantive considerations have led us to include the items relating to having a hobby, presents for friends and the family once a year and being able to afford an afternoon or evening out in the previous two weeks, to our secondary life-style deprivation dimension.

The final factor which we describe as housing and household capital deprivation is made up of the hypothesised housing items and durable household goods which also load on this dimension. The very few items where any question arises about the appropriate factor allocation involve only minor departures from our original specification. Central loads almost equally on the housing and household capital the secondary life-style deprivation as on dimension which is consistent with the fact that both current and housing sector may influence previous income possession of this item. Finally, heating for the living room loads slightly higher on the primary when it is cold deprivation than on the housing deprivation dimensions been included in the latter to avoid having two relating to heating in any of the scales. The alpha reliability coefficients for the scales are as follows:

- (i) Primary Deprivation .70
- (ii) Secondary Deprivation .76
- (iii) Housing and Household Capital Deprivation .70

Table 2 shows a correlation matrix of key variables. Unemployment is significantly correlated with GHQ score (r = .32). The contrast here is between those unemployed and those at work. Despite the attention paid to the measurement of household income in this study our results clearly suggest limits to the degree of precision with which income has been measured; a substantially greater degree of reliability is achieved at decile level of aggregation as opposed to

continuous income level. The correlation of this decile measure with GHQ reaches -.21. Both primary and secondary life-style deprivation and economic strain have slightly higher correlations. Unemployment is significantly associated with income, each of the dimensions of life-style deprivation and economic strain. The correlations range from -.42 in case of income to .11 in the case of housing deprivation. Before turning our attention to the manner in which these variables mediate the impact of unemployment on psychological distress it will be useful to examine the degree of intercorrelation between these variables.

(Table 2 about here)

Income has its highest correlation with secondary deprivation (r = -.45) and the lowest with housing deprivation (r = -.22), while primary deprivation occupies an intermediate position (r = -.35). This pattern of results reasonable on theoretical grounds. seems Housing and household capital items are accumulated over a period time and we might expect life-cycle and location factors be at least as important as income. With regard to primary

deprivation, precisely because of the extremes of deprivation being tapped we would expect not only that people would draw on savings, or other accumulated resources to provide such items but also that they would be extremely likely to make use of available sources of social support and, indeed, to do so with some measure of success. We have no reason to expect that current disposable income will be the sole predictor of life-style deprivation. The range of other variables which we would expect to increase our predictive power include those that might be taken as plausible indicators of command over resources such as, social class, labour force status, and life-cycle factors.

Despite the qualifications it is necessary to regarding the use of income as a variable our measure of household equivalent income does display a much stronger relationship to financial strain (-.43) than that reported by Ullah (1990) individual income data (-.24). using primary and secondary deprivation actually have marginally higher correlations. The multiple correlation of financial strain with income and life-style deprivation is .57. finding helps to account for the fact that unlike other studies our measures of objective deprivation including income are as strongly related to GHQ as economic strain. Ιt would appear that significant advantages are gained measuring resources and deprivation at household level.

While all of the life-style deprivation dimensions are related to financial strain they are in turn strongly related

to each other. Before proceeding to a multivariate analysis aimed at understanding how the impact of unemployment is mediated it is necessary to decide how to treat such variables. It seems most sensible to think in terms of cumulative deprivation. The question arises, for instance, of whether secondary deprivation has any effect when it occurs in the absence of primary deprivation?

In order to pursue this line of inquiry, we start by assigning causal priority in their influence on psychological health to life-style deprivation dimensions as follows:

- (i) Primary Life-Style Deprivation
- (ii) Secondary Life-Style Deprivation
- (iii) Housing and Household Capital Deprivation.

Considerations of both parsimony and meaning dictate that primary deprivation should have priority. Secondary deprivation takes precedence over housing and household deprivation because of the evidence that the capital is much more weakly related to current income. In effect the procedure we adopt is one of semi-partial correlation where each of the life-style variables has its relationship to causally prior dimensions taken into account. What remains is residualised variable which is independent of all variables. When this procedure is adopted housing household capital ceases to have any significant impact on other key variables and it has been dropped from remainder of the analysis.

To assess the independent contribution of our key

variables on GHQ score multiple regression analyses were performed with forced stepwise inclusion of predictor variables. In Table 3 the beta weights of a series of equations are shown. We start by assessing the impact of unemployment on GHQ score and proceed to assess the impact of inclusion of, in turn, (i) income (ii) primary and secondary deprivation and (iii) financial strain. In each of the equations we also control for the effects of physical illness, age, sex and marital status although to simplify the presentation we have not reported the coefficients.

(Table 3 about here)

The addition of income to the analysis reduced the for unemployment from .31 to .27. Entering the life-style deprivation dimensions further reduced the unemployment coefficient to . 23 and income insignificant; primary deprivation plays a particularly important role in predicting GHQ score. Finally, with introduction financial of the strain variable the unemployment coefficient drops to .22, and the life-style coefficients are somewhat reduced while the financial strain variable has a statistically significant effect.

Overall the results show that life-style deprivation and in particular primary deprivation play a significant role in mediating the impact of unemployment. The effect of can be accounted for entirely by its relationship life-style deprivation. Financial strain has an independent effect but its role in explaining psychological distress modest, once we have taken the impact objective deprivation into account. Finally while the role deprivation in mediating unemployment emerges unambiguously must be stressed that unemployment continues to have substantial independent effect.

The independent role of unemployment in this provides a striking contrast to the situation we find when we look at the impact of husbands unemployment on the GHQ scores of married women. Our analysis is based on 1,703 women in our The set of equations presented in sample. Table identical to those presented in Table 3 except that it is now husband's unemployment that we are looking The unemployment of a husband clearly has a significant effect on a woman's level of psychological distress although the effect good deal less than in the case of personal unemployment. As in the case of unemployment the effect of is accounted for by its relationship to life-style deprivation. What is particularly notable though is that for married women their husband's unemployment ceases to have an effect on their GHQ scores when we control for life-style deprivation. Once again financial strain has an independent

effect even when we control for other factors.

(Table 4 about here)

#### Discussion

The starting point of the paper was the neglect of role of poverty in explaining the impact of unemployment psychological health. The case was argued that the conclusion drawn from the available literature that subjective measures of financial strain, but not objective measures, are related to psychological health does not provide a satisfactory basis for understanding the manner in which economic deprivation mediates the impact of unemployment. Furthermore, it was argued that understanding the impact of income requires the process through which it is specified. When income measured at a household level we do in fact find that income bears a clear relationship to GHQ score. We also find that this effect operates indirectly through life-style deprivation. Financial strain continues to have an independent effect but the effect is modest enough not to detract from the significance of our findings regarding to the impact of objective economic deprivation.

A focus on household measures helps to avoid the danger

of removing the social context which makes the experience of individuals meaningful (Fryer, 1988). A study of households also allows us to pursue the frequently proferred suggestion that recognition should be paid to the impact of unemployment family rather than just the individual 1986). For the wives of unemployed men economic deprivation is the critical mediating factor. It is that while the risk of poverty which is associated with unemployment is one of the important ways in which job loss is translated into psychological distress, a good deal more is involved. Unemployment involves exclusion from a range of experiences and associated psychological benefits and exposure to the potentially stressful demands of the new role of being unemployed (Jahoda, 1979, 1982, Warr 1987). For the wives of unemployed men the situation is rather different. While the husband's altered role can clearly implications for their pattern of activities, any alterations their own roles are likely to be modest in comparison those to which their husbands must accommodate. Our findings indicate that where a husbands unemployment does not lead economic deprivation it does not appear to have any impact on the wife's level of psychological distress.

This result does not necessarily imply that a wife's response to her husband's unemployment takes an entirely economic form. However, whatever the emotional aspects of her response are they do not seem to involve a heightened probability of psychological distress. Our finding with

regard to the impact of economic deprivation is consistent with a body of research which has argued that male unemployment may carry a heavy managerial role for women who are forced to live on their wits. (Pahl 1980, 1983, McKee and Bell 1986).

The results we have presented show the importance ofgoing beyond income per se and taking a broader view is deprivation and resources. This illustrated particular force by the impact of primary deprivation on psychological health. It is deprivation of this rather basic sort which involves the enforced absence of socially defined necessities such as food, clothes and heating which has acute and chronic stresses most striking effect. Thus converge to produce an impact on psychological health which stems from hardship in basic enduring economic circumstances, and the experience of what has been described as `economic brinkmanship' (Pearlin et al., 1981).

The absence of secondary or non-essential items plays a more modest role while housing deprivation has no significant impact. The finding in relation to housing is one which may not generalise. In societies where quality of housing is more strongly related to income and labour force status than in the Irish case, because of a different balance of public and private sector housing, a rather different outcome might be expected.

The findings presented here clearly demonstrate the role of poverty in mediating the impact of unemployment not only

for the individuals affected but for other members of important, however, not to replace a Ιt is one-sided emphasis on the latent functions of employment with claims for the exclusive importance of economic deprivation. Unemployment continues to have a substantial and effect on the psychological health of the unemployed individual even when we control for income, life-style deprivation and financial strain. Employment does indeed provide more than money. The vast majority of those employment can enjoy these benefits while at the same time being fortunate enough to escape the psychological damage associated with exclusion from the normal life-style of the society.

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Table 1: Rotated Factor Solution for Life-Style Deprivation Items

	Primary Life-Style Deprivation	Secondary Life-Style Deprivation	Housing and Household Capital Deprivation
Heat poverty	<u>.81</u>	. 33	.11
Food poverty	<u>. 89</u>	.09	. 20
Debt poverty	<u>.76</u>	. 25	. 04
New not second-hand clothes	<u>. 74</u>	. 30	. 29
Meal with meat, chicken or fish	<u>.74</u>	. 30	. 40
A warm waterproof overcoat	<u>.76</u>	.16	. 42
Two pairs of strong shoes A roast or its equivalent	.75	. 25	. 38
once a week	<u>.73</u>	. 33	.25
Annual holiday away from			
home not with relatives To be able to save some of	. 39	<u>. 69</u>	.01
one's income regularly	. 49	<u>. 54</u>	.18
Daily newspaper	. 48	<u>. 50</u>	.11
Telephone	. 25	<u>. 65</u>	. 28
A hobby or leisure activity	. 59	<u>. 4 4</u>	08
Central heating	.19	.54 .50 .65 .44 .59	.40
Presents for friends and family once a year	. 58	<u>. 44</u>	. 20
Car Able to afford an afternoon	. 26	<u>. 60</u>	. 20
or evening out in previous two weeks	. 43	<u>. 38</u>	.08
Bath or shower	.17	01	. 99
ndoor toilet	.16	01	<u>. 98</u>
Washing machine	.02	. 46	. 63
lefrigerator	.26	.23	.62
Colour television	. 21	. 30	. 53
dry damp free dwelling Heating for the living room	. 27	. 30	.47
when it is cold	. 48	. 25	<u>. 30</u>

Table 2: Correlation Matrix of Key Variables

	1	2	3	4	5	6
1. GHQ						
2. Unemployment	. 32					
3. Income	21	42				
4. Primary Deprivation	. 29	. 35	39			
5. Secondary Deprivation	. 23	. 34	49	. 53		
6. Housing and Household Capital Deprivation	.08	.11	22	.31	. 29	•
7. Financial Strain	24	.30	43	. 45	. 49	.18

Table 3: Beta Values for Variables Predicting GHQ Score

	Equation 1	Equation 2	Equation 3	Equation 4
Unemployment	.31**	. 27***	.23***	.22***
Income		-,11***	03	01
Primary Deprivation			.19***	.16***
Secondary Deprivation			.06***	.04**
Financial Strain				.07***
R <sup>2</sup>	.130	.139	.168	.171
** p < .01; *** ]	p < .001.			

Table 4: Beta Values for Variables Predicting GHQ Score for Married Women

	Equation 1	Equation 2	Equation 3	Equation 4
Husband's				
Unemployment	.18***	.12***	.02	.01
Income		12***	01	.02
Primary Deprivation			.30***	. 25***
Secondary Deprivation			.12***	.09***
Financial Strain				.12***
R <sup>2</sup>	. 082	.092	.160	.169

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