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UNHAPPINESS AND UNEMPLOYMENT*

Andrew E. Clark† and Andrew J. Oswald

I. INTRODUCTION

Most people agree that unemployment in the Western economies is worryingly high. Before they can design economic policies to try to do something about it, however, politicians and economists have to decide the answer to an emotionally charged question. Are individuals effectively choosing to be unemployed? If the answer is yes, the State might wish to reduce the attractiveness of being without work, and to allow those in jobs to keep a larger share of the tax revenue that at present goes to cross-subsidize the jobless. If the answer is no, the State may have to look elsewhere for ways to tackle unemployment, and perhaps consider methods of directly raising the number of jobs¹ rather than reducing the number of benefit claimants. The tension between these opposing views is visible in most public debates about the nature of unemployment. Put loosely, the first of the two is the right-wing position that unemployment is predominantly voluntary,² and the second the left-wing position that unemployment is predominantly involuntary.

It might be thought that, as this is arguably the necessary starting question for any analysis of unemployment policy, economics journals would be full of studies that attempt to evaluate the voluntariness of unemployment. In practice, such studies hardly exist. The probable reason is that economists have traditionally been hostile to the notion that utility can be measured. A different attitude is found among psychologists (who might be thought to be better qualified than economists to judge such things). Thousands of papers in the psychology literature are concerned with the statistical analysis of subjective utility information.³

This paper, which is in the psychologists' tradition, uses data from the first sweep of the new British Household Panel Study to try to test whether, in the 1990s, unemployed people are relatively happy or unhappy. It does this by using mental well-being scores from a form of psychiatric evaluation known as the General Health Questionnaire. The paper also touches upon various related questions. Are young people less concerned than the old about being

† We are grateful to Danny Blanchflower, David Greenway, Barry McCormick and Peter Warr for useful discussions.

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¹ A discussion of possible policies is contained in Clark and Layard (1993).

² An argument close to this can be found in Minford (1983).

³ Warr (1987) and Argyle (1989) are readable introductions. Recent papers by economists include Blanchflower, Oswald and Warr (1993), Clark (1992, 1994) and Clark and Oswald (1993). Easterlin (1974) is a famous paper by an economist who wishes to argue that economic growth does not raise happiness. Veenhoven (1991) disputes the evidence. Technical discussions of the difficulties of measuring subjective well-being are contained in sources such as Bradburn (1969), Larsen, Diener and Emmons (1984), Pavot and Diener (1993) and Warr (1990).

unemployed? Is it easier, psychologically, to be unemployed in high-unemployment areas like the North? Does the distress from unemployment decrease with the duration of joblessness? Is joblessness worse for men or women, and for the highly educated or for those with low levels of education?

In cross-section analyses by social scientists, lines of causality are often open to debate. The same is true in this case. If, in the data, the unemployed appear to be less happy and to have poorer mental health than those in jobs, it could be that this is because such people are inherently less desirable as employees. In other words, psychological status might be the cause, rather than the effect, of joblessness. Although this objection is hard to overturn conclusively, there is longitudinal evidence, collected by psychologists from smaller samples, that sheds doubt on such an interpretation. A summary is provided by Warr, Jackson and Banks (1988). The paper refers to this form of evidence where it is relevant.

II. UNEMPLOYMENT AND UNHAPPINESS

The analysis draws upon data collected recently by an interdisciplinary research team. The first sweep of the British Household Panel Study provides information, for the year 1991, about a random sample of approximately six thousand working Britons. One way to assess these people's feelings of subjective well-being is to use their scores from the General Health Questionnaire (GHQ) section of the survey. Argyle (1989) argues that a GHQ assessment is one of the most reliable indicators of psychological distress or 'disutility'. In its simplest form this assessment weights the answers to the following set of questions.

Have you recently:

- *1. Been able to concentrate on whatever you are doing?
2. Lost much sleep over worry?
- *3. Felt that you are playing a useful part in things?
- *4. Felt capable of making decisions about things?
5. Felt constantly under strain?
6. Felt you couldn't overcome your difficulties?
- *7. Been able to enjoy your normal day-to-day activities?
- *8. Been able to face up to your problems?
9. Been feeling unhappy and depressed?
10. Been losing confidence in yourself?
11. Been thinking of yourself as a worthless person?
- *12. Been feeling reasonably happy all things considered?

People's answers to these questions are coded on a four-point scale running from 'disagree strongly' to 'agree strongly'. Starred items are coded in reverse, so that, for example, zero then corresponds to 'agree strongly'. These twelve are then combined into a total GHQ level of mental distress in which high numbers correspond to low feelings of well-being. The data provide a mental stress or, less accurately, 'unhappiness' level for each individual in the sample.

There are various ways to work with GHQ responses. This paper calculates so-called 'Caseness scores'. These are produced by taking people's answers to

the twelve questions that are listed above and summing the number of times the person places himself or herself in the fairly stressed or highly stressed category. With this method, the lowest possible level of well-being corresponds to a caseness level of 12 (meaning that the individual felt stressed on every one of the twelve questions). The highest level of well-being corresponds to 0 (meaning that the individual felt stressed on none of the twelve questions). Individuals with high caseness levels are defined as people who would benefit from psychiatric treatment. To make the results easier to read, later statistics are described as measures of mental distress. More accurately, however, they are caseness levels.

If unemployment is voluntary, the jobless should presumably be just as contented, other things held constant, as those with jobs. It might be objected that the answers to a survey could be manipulated by unemployed workers. Such dissembling cannot be ruled out. Nevertheless, it is not easy to believe that, in the middle of a long interview and questionnaire, unemployed individuals – who like all other interviewees have been promised confidentiality – strategically lie to represent themselves as having low well-being scores on the GHQ questions summarised above. It is not obvious what the motive would be for deceit of this kind. Moreover, as explained below, some of the patterns found in the data have been discovered before on different samples under very different conditions.

The data reveal evidence of involuntary, rather than voluntary, unemployment. Unemployed Britons show high levels of mental distress. Using the scale just described, the mean levels are the following.

<i>Labour market status</i>	<i>N</i>	<i>Average Mental Distress</i>
Unemployed	522	2.98
Employee	4893	1.45
Self-employed	736	1.54

In other words, the 522 jobless people in the sample had approximately twice the mean mental distress score of those with jobs.⁴ The difference between the employed and unemployed is statistically significant (with a t-statistic of over 10).

To understand the size of this effect, which is large, it is necessary to have some feel for the statistical distribution of the six thousand answers. In the full sample, taking everyone classified as in the labour force, more than half of all individuals report a mental distress score of zero. This is, by a large margin, the modal characteristic; it is also, by a narrow margin, the median characteristic. Just under one thousand other individuals have a distress level of 1, and approximately five hundred have a distress level of 2. The great majority of Britons, therefore, show low degrees of GHQ distress. Moving through the remaining scores from 3 to 12, the numbers of individuals become gradually smaller. The mean difference of approximately one-and-a-half points on an

⁴ A causal interpretation of the correlation is made more plausible by longitudinal studies such as Warr (1978), who tracked jobless workers' declining mental well-being after the closure of a steelworks, and Jackson, Stafford, Banks and Warr (1983), who showed that movement from unemployment into paid work was accompanied by a rise in well-being.

unemployed person's distress level means that those without work appear to be substantially more stressed than people with jobs.⁵

The raw data also show that mental distress is found disproportionately among women,⁶ among people in their thirties, and (though the effect is small) among those with high levels of education. For each sub-group, unemployed individuals report much lower well-being.

A cross-tabulation by education is a natural place to begin.

	<i>N</i>	<i>Mental distress</i>
High education (HNC up to degree)		
In work	1612	1.48
Unemployed	86	3.44
Medium education (GCSE up to A level)		
In work	2157	1.43
Unemployed	161	3.15
Low education (less or no qualifications)		
In work	1848	1.43
Unemployed	273	2.70

This shows that distress from joblessness is, at 3.44, greatest for those who are highly educated. Although it is impossible to be sure why this is, the result fits with the economist's presumption that, because of the greater foregone wage, the opportunity cost of unemployment should be larger for the highly-educated.

It is well known that in Britain the unemployment rate is much greater among young people than among the old. Is there anything to the idea that the young are somehow more content to be without a job? The following tabulation throws some light on this issue.

	<i>N</i>	<i>Mental distress</i>
Age less than 30		
In work	1582	1.43
Unemployed	248	2.69
Age 30-49		
In work	2941	1.56
Unemployed	168	3.42
Age over 50		
In work	1104	1.17
Unemployed	106	2.93

A powerful association between unemployment and mental distress is again apparent. For each of three age-bands, the well-being levels of the jobless are roughly half those of workers. The utility penalty attached to joblessness is smallest for those aged under thirty years old. The gap in mental distress for this

⁵ There is longitudinal evidence consistent with these apparently big effects. Banks and Jackson (1982), using a sample of young people, studied GHQ scores before and after the subjects left school. Those who found jobs exhibited a large decline in mental distress; those who did not find work showed greatly increased distress scores.

⁶ This contrasts with Clark's (1992) finding that women are happier at work.

group is 1.26 points (that is, 2.69–1.43). For those aged thirty to forty nine, the gap is larger at 1.86. It is 1.76 for those over the age of fifty. Unemployment does, it seems, worry the young the least.

The unemployment percentage among the youngest group is 14 %, among the middle group is 5 %, and among the oldest group is 9 %. Hence there is a crude negative association between the utility penalty and the proportion unemployed. Although it is impossible to say anything definite about causality, it is conceivable, on the basis of these findings, that young people are unemployed more than the old because they find the state of unemployment less stressful than do the old. An alternative possibility is that young people worry less about unemployment because they recognise that it happens more to people like them.

Is it easier being unemployed once one has been without work for some time, or if one lives in a region with high unemployment? The answer to these questions is yes. The data are as follows.

	<i>N</i>	<i>Mental distress</i>
Unemployed in		
Region > average unemployment	262	2.81
Region < average unemployment	260	3.15
Unemployment duration		
> one year	197	2.74
< one year	323	3.13

However, the t-tests on these differences are insignificant at the five per cent level.

There is a relationship, in these data, between the rate of joblessness in a region and the average loss of well-being from being unemployed. A revealing check can be done by looking at the graph between the regional unemployment rate and the utility gap between working and not working. For example, in the region North–West, the average difference in mental distress between those working and those unemployed is –1.1 (so the unemployed are worse off by this amount). This is the region with the second-smallest utility gap. The unemployment rate in the North–West in the year of the survey, namely 1991, was 9.8 %. This was the second-highest unemployment rate across the regions. The Rest of the North region had a utility gap of –0.9, and an unemployment rate of 10.4 %. These are, respectively, the smallest loss in mental well-being from joblessness of any region, and the greatest unemployment rate of any region. If one had to be unemployed, this region was the least unpleasant to be unemployed in. Perhaps not coincidentally, it also had the greatest amount of joblessness. At the other end of the distribution, and of the country, unemployment is relatively more unpleasant, and there is less of it. In the South–East excluding London, for example, the unemployment rate in the data is 6.7 % (the second-lowest regional level in Britain) and the utility gap is –1.9 (second-highest). Although the relationship is not perfect, Figure 1 shows that for the eleven regions of Great Britain there appears to be a positive link

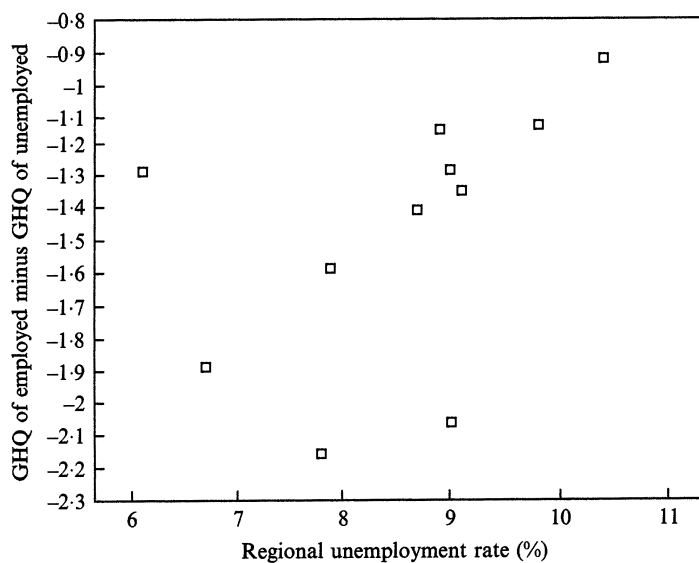


Fig. 1. Regional unemployment and individual utility loss.

Table 1
Proportion of People With Low Subjective Well-Being
 (Those scoring 2 or worse on the mental distress scale)

	Number	Mean	Standard Error	t-statistic
All	5629	0.2992	0.006	9.94
	522	0.5249	0.022	
Men	2966	0.2664	0.008	8.47
	365	0.4986	0.026	
Women	2663	0.3357	0.009	6.18
	157	0.5860	0.039	
Age < 30	1582	0.3047	0.012	5.65
	248	0.4960	0.032	
Age 30-49	2941	0.3234	0.009	7.15
	168	0.6012	0.038	
Age 50+	1104	0.2274	0.013	4.86
	106	0.4717	0.049	
High education	1612	0.3176	0.012	6.03
	86	0.6395	0.052	
Medium education	2157	0.3032	0.010	5.52
	161	0.5280	0.039	
Low education	1848	0.2771	0.010	6.44
	273	0.4835	0.030	
Unemployed	262	0.4885	0.031	1.67
High unemployment region	260	0.5615	0.031	
Another u/e'd	84	0.4762	0.055	0.97
Person in h/h	438	0.5342	0.024	
Duration over one year	197	0.4924	0.036	1.16
	323	0.5449	0.028	

The second row in each case gives figures for the unemployed, the first row the rest of the sample.

Table 2
Mental Well-Being Equations
 (Ordered probits on the full labour force sample)

Unemployed	-0.621	(0.049)	-0.689	(0.051)	-0.640	(0.051)	-0.642	(0.051)
Self-employed	-0.064	(0.044)	-0.129	(0.046)	-0.134	(0.046)	-0.135	(0.046)
Male	—	—	0.187	(0.030)	0.162	(0.030)	0.161	(0.030)
Age	—	—	-0.032	(0.007)	-0.031	(0.008)	-0.030	(0.008)
Age Squared	—	—	4.4E-4	(8.7E-5)	4.3E-4	(1.0E-4)	4.2E-4	(1.0E-4)
Region dummies								
Inner London	—	—	-0.145	(0.083)	-0.104	(0.085)	-0.103	(0.084)
Outer London	—	—	-0.190	(0.074)	-0.189	(0.075)	-0.195	(0.075)
South West	—	—	-0.127	(0.058)	-0.128	(0.059)	-0.130	(0.059)
East Anglia	—	—	-0.018	(0.069)	-0.020	(0.069)	-0.020	(0.069)
East Midlands	—	—	0.092	(0.091)	0.052	(0.092)	0.052	(0.092)
West Midlands	—	—	-0.087	(0.071)	-0.094	(0.071)	-0.095	(0.071)
conurbation								
Rest of	—	—	-0.127	(0.084)	-0.101	(0.086)	-0.112	(0.085)
West Midlands								
Greater Manchester	—	—	-0.101	(0.078)	-0.113	(0.079)	-0.112	(0.079)
Merseyside	—	—	-0.158	(0.085)	-0.135	(0.086)	-0.138	(0.086)
Rest of North West	—	—	-0.158	(0.108)	-0.220	(0.108)	-0.219	(0.108)
South Yorkshire	—	—	-0.070	(0.085)	-0.074	(0.085)	-0.076	(0.085)
West Yorkshire	—	—	-0.168	(0.097)	-0.187	(0.098)	-0.186	(0.098)
Rest of Yorkshire	—	—	-0.213	(0.089)	-0.200	(0.090)	-0.203	(0.090)
and Humberside								
Tyne and Wear	—	—	0.154	(0.098)	0.137	(0.099)	0.138	(0.099)
Rest of North	—	—	-0.087	(0.108)	-0.110	(0.109)	-0.113	(0.109)
Wales	—	—	-0.036	(0.089)	-0.063	(0.090)	-0.062	(0.090)
Scotland	—	—	-0.192	(0.082)	-0.203	(0.082)	-0.203	(0.082)
Education								
Higher	—	—	-0.055	(0.038)	-0.123	(0.039)	-0.123	(0.039)
A/O/Nursing	—	—	-0.028	(0.036)	-0.061	(0.036)	-0.060	(0.036)
Health								
Excellent	—	—	—	—	0.662	(0.042)	0.662	(0.042)
Good	—	—	—	—	0.398	(0.038)	0.397	(0.038)
Race								
Black	—	—	—	—	0.154	(0.116)	—	—
Asian subcontinent	—	—	—	—	0.211	(0.168)	—	—
Marital status								
Married	—	—	—	—	0.078	(0.049)	0.074	(0.049)
Separated	—	—	—	—	-0.265	(0.104)	-0.268	(0.104)
Divorced	—	—	—	—	-0.173	(0.069)	-0.175	(0.069)
Widowed	—	—	—	—	-0.161	(0.126)	-0.166	(0.126)
Number of children								
1	—	—	—	—	-0.130	(0.045)	-0.131	(0.045)
2	—	—	—	—	-0.045	(0.048)	-0.046	(0.048)
3 +	—	—	—	—	-0.034	(0.068)	-0.036	(0.068)
Intercept	0.153	(0.018)	0.682	(0.142)	0.153	(0.193)	0.299	(0.158)
MU ₂	0.384	(0.012)	0.390	(0.012)	0.402	(0.013)	0.402	(0.013)
MU ₃	0.656	(0.016)	0.664	(0.016)	0.686	(0.016)	0.685	(0.016)
MU ₄	0.880	(0.018)	0.891	(0.018)	0.921	(0.019)	0.921	(0.019)
MU ₅	1.065	(0.020)	1.079	(0.021)	1.115	(0.021)	1.115	(0.021)
MU ₆	1.262	(0.023)	1.277	(0.023)	1.320	(0.024)	1.319	(0.024)
MU ₇	1.445	(0.026)	1.463	(0.026)	1.511	(0.027)	1.511	(0.027)
MU ₈	1.608	(0.029)	1.629	(0.029)	1.682	(0.030)	1.682	(0.030)
MU ₉	1.807	(0.033)	1.830	(0.034)	1.891	(0.035)	1.891	(0.035)
MU ₁₀	1.980	(0.038)	2.002	(0.038)	2.070	(0.040)	2.069	(0.040)
MU ₁₁	2.233	(0.047)	2.258	(0.048)	2.337	(0.050)	2.337	(0.050)
MU ₁₂	2.580	(0.068)	2.607	(0.068)	2.692	(0.070)	2.692	(0.070)
Number of observations	6151		6135		6117		6117	
Log Likelihood	-9965.87		-9880.34		-9700.97		-9701.98	

between the unemployment rate and the smallness of the utility loss from being without work.

As a further illustration of the spread of different well-being levels in the population, Table 1 gives the proportion of people in the labour force reporting mental distress levels of 2 or above. Also given is, in each category, the proportion for those who are unemployed. These numbers are presented in the row below each line. By way of illustration, of the total of 5,629 employed workers, 29.9% scored worse than a 2 on mental distress. Of 522 unemployed workers, 52.5% scored worse than a 2. This remarkable difference is an indication of the way that the distribution of the unemployed's mental well-being is heavily skewed to low levels of utility.

III. REGRESSION RESULTS

Although the previous section uses only elementary methods, the patterns found in the data are confirmed when more formal multivariate techniques are employed. This section describes the results of estimating ordered probit equations in which individuals' well-being levels are regressed on a set of personal characteristics.⁷ Tests of the earlier hypotheses can then be performed in circumstances where other factors are held constant.

A number of ordered probit equations are given in Table 2. These are mental well-being equations in which the earlier GHQ distress measure has been multiplied by minus one. The dependent variable can be thought of as an ordered variable which takes values between zero and minus twelve (where minus twelve is the lowest possible level of subjective well-being).

Unemployment enters negatively in Table 2's four different specifications. Its coefficient is consistently close to -0.6 , with a well-determined standard error of approximately 0.05. Therefore the effect of being jobless is, at any conventional level, statistically significant and is negatively correlated with well-being. As can be seen, this effect is robust across varied specifications. The effect is quantitatively large. If these equations accurately capture a causal link, joblessness depresses well-being more than any other single characteristic (including important negative ones such as divorce and separation).

Table 2 builds up, by the gradual addition of extra regressors, to larger specifications. The fourth column is the preferred form. The Table reveals that, as in Clark, Oswald and Warr (1993), there is a U-shape in mental well-being with respect to age. On average, 'happiness' is lowest in a person's mid-thirties. Regional dummies are in a number of cases statistically significant. The self-employed show slightly lower mental distress than employees.⁸ As in the cross-tabulations, highly-educated individuals show more distress than others. It

⁷ This section can be omitted by readers unfamiliar with the statistical techniques, because the key patterns are visible in a rough way in the cross-tabulations set out in the previous section.

⁸ Blanchflower and Oswald (1992) find, however, that job satisfaction is greatest among self-employed Britons and Americans.

Table 3
Mental Well-Being Equations: Further Experiments

(Ordered probits on the full labour force sample)

Unemployed						
Age < 30	-0.558	(0.074)	—	—	—	—
Age 30-49	-0.747	(0.085)	—	—	—	—
Age > 50	-0.656	(0.110)	—	—	—	—
Unemployed						
High u/e region	—	—	-0.563	(0.071)	—	—
Low u/e region	—	—	-0.720	(0.070)	—	—
Unemployed						
Duration < 6 months	—	—	—	—	-0.764	(0.074)
Duration 6-12 months	—	—	—	—	-0.633	(0.107)
Duration 1-2 years	—	—	—	—	-0.632	(0.129)
Duration 2+ years	—	—	—	—	-0.426	(0.099)
Self-employed	-0.139	(0.046)	-0.137	(0.046)	-0.134	(0.046)
Male	0.163	(0.030)	0.160	(0.030)	0.160	(0.030)
Age	-0.027	(0.009)	-0.030	(0.008)	-0.031	(0.008)
Age Squared	3.9E-4	(1.1E-4)	4.2E-4	(1.0E-4)	4.3E-4	(1.0E-4)
Region dummies						
Inner London	-0.101	(0.084)	-0.085	(0.084)	-0.109	(0.084)
Outer London	-0.195	(0.075)	-0.179	(0.076)	-0.193	(0.075)
South West	-0.130	(0.059)	-0.117	(0.059)	-0.125	(0.059)
East Anglia	-0.019	(0.069)	-0.004	(0.070)	-0.015	(0.069)
East Midlands	0.053	(0.092)	0.066	(0.092)	0.050	(0.092)
West Midlands constituency	-0.095	(0.071)	-0.079	(0.072)	-0.090	(0.071)
Rest of West Midlands	-0.111	(0.085)	-0.117	(0.085)	-0.116	(0.085)
Greater Manchester	-0.110	(0.079)	-0.113	(0.079)	-0.109	(0.079)
Merseyside	-0.138	(0.086)	-0.138	(0.086)	-0.140	(0.086)
Rest of North West	-0.223	(0.108)	-0.223	(0.108)	-0.228	(0.108)
South Yorkshire	-0.074	(0.085)	-0.076	(0.085)	-0.079	(0.085)
West Yorkshire	-0.191	(0.098)	-0.189	(0.098)	-0.187	(0.098)
Rest of Yorkshire and Humberside	-0.204	(0.090)	-0.202	(0.090)	-0.204	(0.090)
Tyne and Wear	0.140	(0.099)	0.140	(0.099)	0.133	(0.099)
Rest of North	-0.113	(0.109)	-0.110	(0.109)	-0.114	(0.109)
Wales	-0.061	(0.090)	-0.063	(0.089)	-0.060	(0.090)
Scotland	-0.202	(0.082)	-0.204	(0.082)	-0.202	(0.082)
Education						
Higher	-0.123	(0.039)	-0.123	(0.039)	-0.117	(0.039)
A/O/Nursing	-0.058	(0.036)	-0.061	(0.036)	-0.058	(0.036)
Health						
Excellent	0.662	(0.042)	0.662	(0.042)	0.668	(0.042)
Good	0.398	(0.038)	0.398	(0.038)	0.401	(0.038)
Marital status						
Married	0.073	(0.049)	0.0076	(0.049)	0.081	(0.049)
Separated	-0.267	(0.104)	-0.270	(0.104)	-0.260	(0.104)
Divorced	-0.171	(0.069)	-0.177	(0.069)	-0.175	(0.069)
Widowed	-0.161	(0.126)	-0.167	(0.126)	-0.157	(0.126)
Number of children						
1	-0.132	(0.045)	-0.131	(0.045)	-0.136	(0.045)
2	-0.047	(0.048)	-0.048	(0.046)	-0.052	(0.048)
3+	-0.034	(0.068)	-0.037	(0.068)	-0.042	(0.068)
Intercept	0.229	(0.164)	0.291	(0.159)	0.317	(0.159)
MU ₂	0.402	(0.013)	0.402	(0.013)	0.402	(0.013)
MU ₃	0.686	(0.016)	0.686	(0.016)	0.686	(0.016)
MU ₄	0.921	(0.019)	0.921	(0.019)	0.921	(0.019)
MU ₅	1.115	(0.021)	1.115	(0.021)	1.116	(0.021)
MU ₆	1.320	(0.024)	1.320	(0.024)	1.321	(0.024)
MU ₇	1.511	(0.027)	1.511	(0.027)	1.512	(0.027)

Table (*cont.*)

MU8	1.683	(0.030)	1.683	(0.030)	1.684	(0.030)
MU9	1.891	(0.035)	1.892	(0.035)	1.894	(0.035)
MU ₁₀	2.070	(0.040)	2.070	(0.040)	2.073	(0.040)
MU ₁₁	2.338	(0.050)	2.337	(0.050)	2.340	(0.050)
MU ₁₂	2.694	(0.070)	2.693	(0.070)	2.695	(0.070)
Number of observations	6117		6117		6117	
Log likelihood	-9700.54		-9700.69		9698.01	

may be that this is some kind of comparison effect caused by high aspirations.⁹ Well-being is higher, as might be expected, among the healthy. Race is statistically insignificant. Married people have the lowest degree of mental distress. Having children (especially one) is associated with less contentment. Experiments with income as a regressor proved inconclusive: robust effects were not found. Although unexpected, this is not too serious a problem for the present analysis, because the aim is to chart the total disutility associated with joblessness. Entering income as a control, and then calculating the coefficient on unemployment status, would give the pure non-pecuniary loss from joblessness.

The ordered probit's threshold levels are denoted MU₂ up to MU₁₂. The coefficients on them, in Table 2, suggest that being unemployed is enough to change an individual's distress level from 0 to 2, or 1 to 4, or 4 to 8. As the possible values of mental distress range from 0 to 12, and the data are bunched at the bottom end of the distribution, it seems that joblessness has a large negative effect upon well-being.

Further results are given in Table 3, which reports another three well-being ordered probit equations. The first column includes an interaction between being unemployed and various age levels. The largest negative effect from joblessness mimics that in the cross-tabulations: it is for unemployed individuals aged between 30 and 49. The young suffer least from the loss of a job, but they still suffer. The second column of Table 3 interacts the state of being unemployed with the state of living in a region with above-average unemployment. Distress is greatest among those surrounded by low unemployment. The standard errors are individually well-determined, which sharpens the result from the cross-tabulation, but the F test that the coefficients are identical is not rejected at 5%. This finding may merely indicate that it is harder to put up with unemployment if one lives in a place where few people are without a job. One piece of evidence consistent with such an interpretation is produced by Platt and Kreitman (1985). Their Edinburgh study reports that attempted suicide by unemployed men (relative to employed men) is less common in high-unemployment parts of the city. The third column of Table 3 uncovers a monotonic interaction effect between unemployment and duration

⁹ Clark and Oswald, 1993, concludes that job satisfaction is a declining function of the person's level of educational qualification).

of unemployment.¹⁰ The loss in well-being is estimated at -0.764 after less than six months of unemployment, gradually reducing to -0.426 after two years' unemployment duration. The F test that the coefficients on these interactions are all the same is rejected at the 5% level. Distress is greatest among those who have recently lost their job.

IV. CONCLUSIONS

As unemployment rises secularly over time, there is an increasing feeling among Western politicians that something must be done. A commonly expressed view is that, perhaps because of the generosity of financial aid to those without jobs, large numbers of people in Britain may be choosing to be unemployed. The implications of such thinking are stark.

With this kind of argument in mind, the paper uses data from the new British Household Panel Study in an attempt to assess the utility levels of the jobless. It explores, and rejects, the hypothesis that unemployment is voluntary. Unemployed people in Great Britain in 1991 have much lower levels of mental well-being than those in work. As a rough illustration, being unemployed is worse, in terms of lost 'utility' units, than divorce or marital separation. The results in this paper suggest that British policy measures aimed at cutting out supposedly high levels of voluntary joblessness would be misguided.

Nevertheless, there are signs in the data that high unemployment levels across regions and age-groups are correlated with relatively low disutility from joblessness.¹¹ First, distress from unemployment is less among the young and among workers in high-unemployment areas such as the North. Secondly, people who have been unemployed a long time show less distress than those who have recently lost their jobs. In this sense, the long-term unemployed are somewhat 'happier' than the short-term unemployed. Exactly what these correlations mean, and how a government should react to them, is a pressing matter for research.

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¹⁰ It is natural to wonder if this might just stem from the fact that those most averse to joblessness may be likely to leave the pool of unemployment most quickly. Longitudinal research, such as the study described in Warr and Jackson (1987), against suggests not.

¹¹ It may be worth recalling that in, for example, an efficiency-wage model such as Shapiro and Stiglitz (1984), it will be true both that unemployment is involuntary and that the level of unemployment benefit affects the equilibrium unemployment rate. If this is the correct general way to think about the labour market, governments face the difficult task of choosing the optimal compromise between having high benefits with high unemployment and having low benefits with much unhappiness among a smaller number of jobless.

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