

Table 1: Descriptive statistics for waves 1 and 18 of BHPS respondents

	<b>wave 1</b> <b>(N=4691)</b>	<b>%</b>	<b>wave 18</b> <b>(N=6014)</b>	<b>%</b>
<b>Absent due to sickness/injury</b>				
Sickness/injury	88	1.88	63	1.05
<b>Age</b>				
20 and less	357	7.61	326	5.42
21-29	1067	22.75	1066	17.73
30-39	1248	26.60	1516	25.21
40-49	1253	26.71	1754	29.17
50-59	672	14.33	1176	19.55
60-65	94	2.00	176	2.93
<b>Marital Status</b>				
Married/Couple	3390	72.27	4356	72.44
Widowed/Divorced/Separated	324	6.91	453	7.53
Single	977	20.83	1205	20.04
<b>Number of children</b>				
0	2990	63.74	3698	61.49
1	720	15.35	1098	18.26
2	727	15.5	919	15.28
3 or more	254	5.41	299	4.97
<b>Health-related variables</b>				
Mental illness (binary=1 if GHQ12>=4)	721	15.37	1062	17.66
Physical health conditions (binary=1 for at least one of a range of conditions)	2207	47.05	2945	48.97
<b>Job status</b>				
Full-time	3823	81.5	4826	80.25
Part-time	868	18.5	1188	19.75
<b>Number of employees</b>				
<=24	1709	36.43	2136	35.52
25-99	1184	25.24	1555	25.86
100-499	1062	22.64	1261	20.97
500+	736	15.69	1062	17.66
<b>Occupation</b>				
Higher	1579	33.66	2589	43.05
Intermediate	2228	47.5	2432	40.44
Routine and manual	884	18.84	993	16.51
<b>Employment sector</b>				
Private	3067	65.38	3815	63.44
Public				
Broad vocational	270	5.76	423	7.03
Broad non-vocational	950	20.25	1321	21.97
Health vocational	118	2.52	175	2.91
Non-health non-vocational	1102	23.49	1569	26.09
Nurses and midwives	95	2.03	121	2.01
Not nurses or midwives	1125	23.98	1623	26.99
Self-employed	207	4.41	264	4.39
Non-profit	197	4.20	191	3.18

Table 2: Descriptive statistics of employees using BHPS (wave 1-18): estimation sample

	N	%
<b>Absent due to sickness/injury</b>	1,661	1.61
<b>Age</b>		
20 and less	5,875	5.69
21-29	21,917	21.23
30-39	28,926	28.02
40-49	26,602	25.77
50-59	17,933	17.37
60-65	1,968	1.91
<b>Marital status</b>		
Married	58,784	56.95
Couple	15,550	15.06
Widowed	951	0.92
Divorced/separated	7,052	6.83
Single	20,884	20.23
<b>Number of children</b>		
0	64,195	62.19
1	17,304	16.76
2	16,290	15.78
3 or more	5,432	5.26
<b>Health-related variables</b>		
Mental illness (binary=1 if GHQ12 $\geq$ 4)	18,050	17.49
Physical health conditions (binary=1 for at least one of a range of conditions <sup>†</sup> )	50,245	48.68
<b>Job status</b>		
Full-time	83,963	81.34
Part-time	19,258	18.66
<b>Number of employees</b>		
01-24	37,682	36.51
25-99	26,353	25.53
100-499	22,343	21.65
500+	16,843	16.32
<b>Occupation</b>		
Professional & managerial	40,145	38.89
Intermediate	44,948	43.55
Routine and manual	18,128	17.56
<b>Employment sector<sup>‡</sup></b>		
Private	67,277	65.18
Public:		
Broad vocational	6,472	6.27
Broad non-vocational	20,969	20.31
Health vocational	2,604	2.52
Non-health non-vocational	24,837	24.06
Nurses and midwives	1,894	1.83
Not nurses or midwives	25,547	24.75
Self-employed	4,015	3.89
Non-profit	4,488	4.35
Observations	103,221	100

<sup>†</sup> arm/leg, sight, hearing, skin, chest, heart/blood, liver, diabetes, epilepsy, migraine, alcohol/drugs, cancer, stroke and others

<sup>‡</sup> Employment sector sums up to 100% for each sub-category of the public sector respectively

Table 3: Frequency of respondents with mental illness, and raw absenteeism rates by employment sector: estimation sample

	Absenteeism rate (%)	Mental illness (%)
Private sector	1.49	16.70
Public	2.14	19.19
Public: Broad vocational <sup>1</sup>	1.78	20.35
Public: Broad non-vocational	2.25	18.83
Public: Health services	2.27	20.85
Public: Non-health services	2.12	19.01
Public: Nurses	2.69	22.07
Public: Non-nurses	2.09	18.97
Self-employed	0.37	17.26
Non-profit	1.29	19.03
Observations	103,221	103,221

Table 4: Random effects logit models for the relationship between sickness absence, employment sector, health and other demographic and employment characteristics. Odds ratios (OR) reported for 3 alternative definitions of public vocation/non-vocational groups

	Model 1: Vocation (Broad)	Model 2: Vocation (Health Services)	Model 3: Vocation (Nurse and Midwives)
Control variables	Odds ratios (OR)		
<i>Employment sector (base: Public non-vocational group)</i>			
Public vocational	1.159	<b>1.504**</b>	<b>1.771**</b>
Private	<b>0.767***</b>	<b>0.769***</b>	<b>0.771***</b>
Self-employed	<b>0.234***</b>	<b>0.234***</b>	<b>0.235***</b>
Non-profit	<b>0.687**</b>	<b>0.689**</b>	<b>0.692**</b>
Mental illness (GHQ12 $\geq$ 4)	<b>4.130***</b>	<b>4.131***</b>	<b>4.131***</b>
Physical health conditions	<b>2.834***</b>	<b>2.833***</b>	<b>2.833***</b>
<i>Age (base: 16 – 20 years)</i>			
Age 21 – 29	0.853	0.852	0.855
Age 30 – 39	0.994	0.993	0.993
Age 40 – 49	1.152	1.156	1.159
Age 50 – 59	<b>1.335*</b>	<b>1.341*</b>	<b>1.342*</b>
Age 60 – 65	<b>1.737**</b>	<b>1.736**</b>	<b>1.739**</b>
<i>Marital status (base: Married)</i>			
Couple	0.858	0.857	0.857
Widowed	1.272	1.261	1.250
Divorced	0.980	0.981	0.980
Single	<b>0.730**</b>	<b>0.730**</b>	<b>0.731**</b>
<i>Female (base: Male)</i>			
Female	<b>1.190**</b>	<b>1.184**</b>	<b>1.180**</b>
<i>Number of children (base: None)</i>			
1 child	0.978	0.979	0.979
2 children	0.918	0.917	0.917
3 children	1.012	1.012	1.012
<i>Part-time (base: Full-time employed)</i>			
Part-time	<b>0.822**</b>	<b>0.819**</b>	<b>0.821**</b>
<i>Size of company (base: 1 – 24)</i>			
25 – 99	<b>1.319***</b>	<b>1.324***</b>	<b>1.326***</b>
100 – 499	<b>1.462***</b>	<b>1.459***</b>	<b>1.461***</b>
500+	<b>1.590***</b>	<b>1.555***</b>	<b>1.550***</b>

<sup>1</sup> The broad vocational category includes health workers, namely medical practitioners, pharmacists/pharmacologists, ophthalmic opticians, dental practitioners, psychologists, nurses, midwives, medical radiographers, physiotherapists, occupational and speech therapists, psychotherapists, therapists and other health associate professionals (not elsewhere specified).

Occupation ( <i>base: Routine and manual</i> )			
Higher occupation	<b>0.426***</b>	<b>0.422***</b>	<b>0.421***</b>
Intermediate occupation	<b>0.750***</b>	<b>0.749***</b>	<b>0.749***</b>
Year ( <i>base: 2008</i> )	Yes	Yes	Yes
Constant	<b>0.003***</b>	<b>0.003***</b>	<b>0.003**</b>
Rho	0.258	0.257	0.257
Observations	103,221	103,221	103,221

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Table 5: Relative effect of mental illness on absenteeism by employment sector (summary results) – Odds ratios (OR) reported

Employment sectors	Vocation: Broad	Vocation: Health Services	Vocation: Nurses and Midwives
Control variables	Odds ratios (OR)		
Public sector			
Broad vocational*mental illness	<b>5.525***</b>	-	-
Broad non-vocational*mental illness	<b>4.385***</b>	-	-
Health services*mental illness	-	<b>5.243***</b>	-
Non-health services*mental illness	-	<b>4.525***</b>	-
Nurses*mental illness	-	-	<b>4.983***</b>
Non-nurses*mental illness	-	-	<b>4.554***</b>
Private sector*mental illness	<b>3.718***</b>	<b>3.721***</b>	<b>3.723***</b>
Self-employed*mental illness	<b>3.124**</b>	<b>3.127**</b>	<b>3.130**</b>
Non-profit*mental illness	<b>9.154***</b>	<b>9.161***</b>	<b>9.168***</b>
Rho	0.257	0.256	0.256
Observations	103,221	103,221	103,221

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Table 5: Relative effect of mental illness on absenteeism by employment sector (full result) – Odds ratios (OR) reported

Control variables	Vocation: Broad	Vocation: Health Service	Vocation: Nurses and Midwives
	Odds ratios (OR)		
Public sector			
Broad vocational*mental illness	<b>5.525***</b>	-	-
Broad non-vocational*mental illness	<b>4.385***</b>	-	-
Health services*mental illness	-	<b>5.243***</b>	-
Non-health services*mental illness	-	<b>4.525***</b>	-
Nurses*mental illness	-	-	<b>4.983***</b>
Non-nurses*mental illness	-	-	<b>4.554***</b>
Private sector*mental illness	<b>3.718***</b>	<b>3.721***</b>	<b>3.723***</b>
Self-employed*mental illness	<b>3.124**</b>	<b>3.127**</b>	<b>3.130**</b>
Non-profit*mental illness	<b>9.154***</b>	<b>9.161***</b>	<b>9.168***</b>
Public: Broad vocational ( <i>base: Private</i> )	1.249	<b>1.663**</b>	<b>2.005**</b>
Public: Broad non-vocational	<b>1.215**</b>	<b>1.195**</b>	<b>1.189**</b>
Self-employed	<b>0.329**</b>	<b>0.328**</b>	<b>0.329**</b>
Non-profit	<b>0.553**</b>	<b>0.553**</b>	<b>0.554**</b>
Physical health conditions	<b>2.830***</b>	<b>2.830***</b>	<b>2.830***</b>
Age 21-29 ( <i>base: 20 and less</i> )	0.852	0.852	0.854
Age 30-39	0.990	0.990	0.990
Age 40-49	1.147	1.152	1.155
Age 50-59	<b>1.329*</b>	<b>1.336*</b>	<b>1.339*</b>
Age 60-65	<b>1.722**</b>	<b>1.723**</b>	<b>1.727**</b>
Couple ( <i>base: Married</i> )	0.858	0.858	0.858
Widowed	1.273	1.261	1.249
Divorced	0.981	0.981	0.979
Single	<b>0.728**</b>	<b>0.729**</b>	<b>0.730**</b>
Female ( <i>base: Male</i> )	<b>1.193**</b>	<b>1.188*</b>	<b>1.183**</b>
1 child ( <i>base: No child</i> )	0.976	0.977	0.977
2 children	0.916	0.915	0.915
3 children	1.010	1.009	1.009
Part-time ( <i>base: Full-time</i> )	0.823	0.820	<b>0.822**</b>
Size of company: 25-99 ( <i>base: 1 – 24</i> )	<b>1.319***</b>	<b>1.324***</b>	<b>1.325***</b>
Size of company: 100-499	<b>1.463***</b>	<b>1.459***</b>	<b>1.461***</b>
Size of company: 500+	<b>1.592***</b>	<b>1.557***</b>	<b>1.552***</b>
Higher occupation ( <i>base: Routine and manual</i> )	<b>0.424***</b>	<b>0.420***</b>	<b>0.419***</b>
Intermediate occupation	<b>0.748***</b>	<b>0.747***</b>	<b>0.747***</b>
Year of survey ( <i>base: 2008</i> )	Yes	Yes	Yes
Constant	<b>0.002***</b>	<b>0.002***</b>	<b>0.002***</b>
Rho	0.257	0.256	0.256
Observations	103,221	103,221	103,221

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Table 6: Sensitivity analyses – Conditional fixed effects models on the role of mental illness on absenteeism by employment sector (Odds ratios reported)

	Vocation: Broad	Vocation: Health Service	Vocation: Nurses and Midwives
Control variables	Odds ratios (OR)		
Public vocational	1.220	1.254	1.387
Private	0.832	0.823	0.824
Self-employed	<b>0.172**</b>	<b>0.170**</b>	<b>0.171**</b>
Non-profit	0.745	0.734	0.735
Mental illness	<b>4.573***</b>	<b>4.569***</b>	<b>4.570***</b>
Physical health problems	<b>2.452***</b>	<b>2.450***</b>	<b>2.449***</b>
Log likelihood	-2594.51	-2594.66	-2594.53
LR chi <sup>2</sup> (41)	684.66	684.37	684.61
Prob>Chi <sup>2</sup>	0.000	0.000	0.000
Observations	11,435	11,435	11,435
***p<0.01, **p<0.05, *p<0.1			

Table 7: Sensitivity analyses – Conditional fixed effects models on the relative role of mental illness on absenteeism across employment sector (Odds ratio reported)

	Vocation: Broad	Vocation: Health Service	Vocation: Nurses and Midwives
Control variables	Odds ratios (OR)		
Public vocational*mental illness	<b>5.263***</b>	<b>5.099***</b>	<b>5.902***</b>
Public non-vocational*mental illness	<b>4.028***</b>	<b>4.178***</b>	<b>4.130***</b>
Private*mental illness	<b>4.595***</b>	<b>4.596***</b>	<b>4.595***</b>
Self-employed*mental illness	<b>4.258**</b>	<b>4.522***</b>	<b>4.524**</b>
Non-profit*mental illness	<b>8.243***</b>	<b>8.185***</b>	<b>8.172***</b>
Public vocational	1.072	1.122	1.135
Private	0.785	0.787	0.784
Self-employed	<b>0.159**</b>	<b>0.160**</b>	<b>0.160**</b>
Non-profit	<b>0.509**</b>	<b>0.510**</b>	<b>0.508**</b>
Physical health problems	<b>2.450***</b>	<b>2.448***</b>	<b>2.447***</b>
Log likelihood	-2592.6	-2593.1	-2592.7
LR chi <sup>2</sup> (45)	688.53	687.56	688.28
Prob>Chi <sup>2</sup>	0.000	0.000	0.000
Observations	11,435	11,435	11,435
***p<0.01, **p<0.05, *p<0.1			